

**Water Quality Report**

# **Oregon Nonpoint Source Pollution Program 2012 Annual Report**

As required by the Federal Clean Water Act

Submitted to: EPA Region 10

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State of Oregon  
Department of  
Environmental  
Quality



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State of Oregon  
Department of  
Environmental  
Quality

# Executive Summary

## Background

This Nonpoint Source Pollution (NPS) program update report is to meet the requirements of section 319 (h) (8) and (11) of the Federal Clean Water Act (CWA) (33 USC 1329). The report documents the activities and accomplishments of the State of Oregon in general and the Oregon Department of Environmental Quality (DEQ) in particular regarding the administration of the State's NPS Program during the period January – December 2012. It should be noted that Oregon plans to revise the NPS Control Program Plan once EPA guidance becomes available.

For this year's Oregon NPS Program Annual Report, the U.S. Environmental Protection Agency (EPA), Region 10 staff provided assistance in the development of the **Oregon Nonpoint Source Pollution Program 2012 Annual Report**. This included providing assistance in the development of the 2012 review of 319-grant work plans and processing Oregon's grant; and GRTS technical assistance and training to develop pollutant load reduction estimates of the 2012 funded projects.

## General Description of Report

Following EPA Section 319 Grant reporting guidelines, the report contains the following required elements:

- Description of Oregon's NPS Program.
- Description of Oregon's Baseline Regulatory Statutes and Non-Regulatory NPS Programs.
- Program Directions and Priorities in 2012.
- Nonpoint Source Management and Administration, Including a Description of Oregon's Performance Partnership Agreement (PPA) and Use of Incremental and Base Funds.
- Identification of the 2012 Project Implementation Activities, which Included the Following Programs/Projects:
  - Total Maximum Daily Loads
  - New Water Quality Standards
  - Watershed Plan Development
  - NPS Projects Funding by Basin/Subbasin
  - Toxic Chemicals
  - Water Quality Issues on Agricultural Lands
  - Pesticide Management
  - Water Quality Issues on State and Private Forest Lands
  - Water Quality Issues on Federal Forest Lands
  - Clean Water State Revolving Fund
  - Drinking Water Protection in Oregon
  - Coastal Zone NPS Program
  - Monitoring and Data
  - Groundwater Management Areas (GWMAs)
- Progress of 319 Grant Funded Projects, including Grant Performance Report Summary, Description of Geographic and Programmatic Priorities for 2012 319 Funding, and progress of 2012 – 319-Grant Funded Projects and Categories.
- Calculated Nitrogen, Phosphorus, and Sedimentation-Siltation Pollutant Load Reduction Estimates of 2012 Funded Projects.
- Description of DEQ's Watershed-Based Plans.
- Success Stories/Environmental Improvement (WQ-10) and (SP-12) Projects and Other.

## Major Accomplishments

Of the many nonpoint source activities accomplished every year by DEQ, the following is the list of the major accomplishments:

- Oregon's total 2012 319-Grant allocation of \$2,172,000 was distributed as follows: \$905,000 or approximately 41.7% was directed to the twenty-six (26) 319 projects grant and the remainder, \$1,267,000 or approximately 58.3 %, was directed to the PPA grant to fund 9.45 DEQ staff positions for the NPS program.
- The \$905,000 total funds for 319 funded projects in 2012 was divided in four areas of emphasis, as follows: BMP Implementation (22.4%), TMDL Implementation (57.2%), Pesticide Stewardship Program (11.1%), and Information and Education (9.3%). Note that "BMP Implementation" did not include implementation of BMPs identified in a TMDL Implementation Plan and "TMDL Implementation" primarily focused on effectiveness monitoring.
- DEQ completed pollutant load reductions estimates for three (3) 319 funded projects initiated in 2012 as follows: 6,095 Pounds/Year Nitrogen Reduction, 2,136 Pounds/Year Phosphorous Reduction, and 1,297 Tons/Year Sedimentation-Siltation Reduction.
- In 2012, DEQ made three Clean Water State Revolving Fund (CWSRF) loans totaling more than \$15 million to three (3) nonpoint source projects to irrigation districts serving central Oregon and a loan to finance small projects that improve the water quality of the Clackamas River watershed.
- One success story was written for the Willamette River in its receipt of international recognition for the water quality improvements accomplished by multi-agency and other stakeholders effort. No SP-12 or WQ-10 Project success story were written for 2012..

## Program Directions

DEQ continues to implement the NPS Program and direct funding into basins impaired by NPS pollution. DEQ is working on prioritizing the work by continuing to develop watershed plans and implementation of the watershed approach. It should be noted that Oregon plans to revise the NPS Management Program Plan once EPA guidance becomes available. In addition, DEQ began developing Implementation-Ready TMDLs, which would incorporate the use of the EPA's key watershed planning components with the nine key NPS elements.

DEQ is committed to a continual improvement in coordination between the various DEQ Water Quality Programs including NPS, TMDLs, Integrated Report, Source Water Protection, Groundwater, Clean Water State Revolving Fund, and 319 Project Grants. DEQ has also been working with staff from the Oregon Water Enhancement Board (OWEB), Natural Resource Conservation Service (NRCS), and other funding entities to prioritize and coordinate our efforts to address nonpoint sources of pollution.

# 1. Introduction

## 1.1 General Description of Report

This NPS program update report is to meet the requirements of section 319 (h) (8) and (11) of the Federal Clean Water Act (CWA) (33 USC 1329). The report documents the activities and accomplishments of the State of Oregon in general and the Oregon Department of Environmental Quality (DEQ) in particular regarding the administration of the State's Nonpoint Source (NPS) Pollution Water Program.

The report covers an update on the NPS activities implemented by the State during the period January – December 2012. Like many other years in the Oregon program, this period was productive. As described below, Oregon is making progress toward meeting the substantial challenges presented by NPS water pollution.

## 1.2 Highlights

The State program continues to use innovative, cooperative, and community-based methods to improve water quality and enhance watersheds.

Some of the activities and accomplishments for 2012 were:

- Oregon's total 2012 319-Grant allocation of \$2,172,000 was distributed as follows: \$905,000 or approximately 41.7% was directed to the twenty-six (26) 319 projects grant and the remainder, \$1,267,000 or approximately 58.3 %, was directed to the PPA grant to fund 9.45 DEQ staff positions for the NPS program.
- The \$905,000 total funds for 2012 was divided in four areas of emphasis, as follows: BMP Implementation (22.4%), TMDL Implementation (57.2%), Pesticide Stewardship Program (11.1%), and Information and Education (9.3%). Note that "BMP Implementation" did not include implementation of BMPs identified in a TMDL Implementation Plan and "TMDL Implementation" primarily focused on effectiveness monitoring.
- For three (3) 319 funded projects, the total **2012** load reduction estimates by pollutant are as follows: **6,095 Pounds/Year Nitrogen Reduction, 2,136 Pounds/Year Phosphorous Reduction, and 1,297 Tons/Year Sedimentation-Siltation Reduction.** Load reduction estimates were included in the EPA database GRTS (Grants Reporting and Tracking System).
- The DEQ and Oregon Department of Forestry (ODF) RipStream project has completed the initial analysis to test whether current riparian protections on fish-bearing streams are adequate to meet water quality standards for temperature. The results of the RipStream project were presented to the BOF and the Board directed ODF to begin rulemaking to address the issue.
- The Clean Water State Revolving Fund (CWSRF) Program provided loans of \$15,350,000 towards (3) three NPS water quality improvement projects.

## 1.3 State or Oregon Water Quality Program

State programs to protect or improve Oregon's water quality date back to 1938. Oregon's point source permit program was the second approved state program in the Country (September 26, 1973). More recently, the state also adopted another landmark program: in 1996, the state adopted the Oregon Plan for Salmon and Watersheds to focus work on watershed restoration and recovery of endangered salmonid populations.



The state water quality program can be divided into the ten interdependent program elements listed below:

1. Water quality standards that establish beneficial uses for the waterbody as well as maximum levels of pollutants that can be in the waterbody without adversely affecting the designated use.
2. Permits for point sources, including stormwater, discharging pollutants to waters of the state.
3. Water Quality 401-Certifications for hydroelectric projects, dredge, and fill activities.
4. NPS TMDLs specifically developed for forestry, agriculture, and urban activities.
5. Biennial assessment of State waters to identify those waters that are not meeting water quality standards.
6. Pretreatment, Sewage Sludge Management, and On-Site System programs to ensure that water quality is not compromised by other land-based activities.
7. Development of TMDLs, which are limits on pollution intended to bring rivers, lakes, and streams into compliance with water quality standards.
8. Cost-share grants and low interest loan programs to address municipal sewage treatment and disposal needs, and activities to reduce or eliminate nonpoint sources of pollution.
9. Information and education outreach activities to create awareness by the public about the importance of NPS pollution and its impact groundwater and surface water quality.
10. Facility or activity-specific compliance assessment, a pilot NPS effectiveness monitoring effort, technical assistance, and enforcement as warranted ensuring State water quality requirements are met.

## 1.4 Partners

The cornerstone of the Oregon water quality program is, to the maximum extent practical, to identify solutions at the local community level. Watershed Councils, Soil and Water Conservation and Irrigation Districts, cities and counties all play an important part in the state's strategy.

Oregon has relied on longstanding partnerships to address various activities and sources of nonpoint source pollution. Many of the state's departments, boards, and commissions are now actively involved in addressing nonpoint source pollution and other watershed concerns. In addition, federal agencies are also partners.

DEQ partners include but are not limited to the following:

### 1.4.1 State Agencies

- Department of Agriculture (ODA) [www.oda.state.or.us](http://www.oda.state.or.us)
- Department of Forestry (ODF) [www.odf.state.or.us](http://www.odf.state.or.us)
- Parks and Recreation Department (OPRD) <http://egov.oregon.gov/OPRD/index.shtml>
- Department of State Lands (DSL) <http://www.oregon.gov/DSL/index.shtml>
- Department of Geology and Mineral Industries (DOGAMI) <http://egov.oregon.gov/DOGAMI/index.shtml>
- Oregon State Marine Board (OSMB) (Boat Ramps and Other Access Points) (Marine Board) <http://www.boatoregon.com/>
- Oregon Watershed Enhancement Board (OWEB) [www.oweb.state.or.us](http://www.oweb.state.or.us)
- Department of Fish and Wildlife (ODFW) [www.dfw.state.or.us](http://www.dfw.state.or.us)
- Department of Land, Conservation and Development (DLCD) [www.lcd.state.or.us](http://www.lcd.state.or.us)
- Department of Oregon Business Development (OBD) <http://www.oregon.gov/OBDD/index.shtml>
- Department of Transportation (ODOT) <http://egov.oregon.gov/ODOT/index.shtml>

### 1.4.2 Federal Agencies

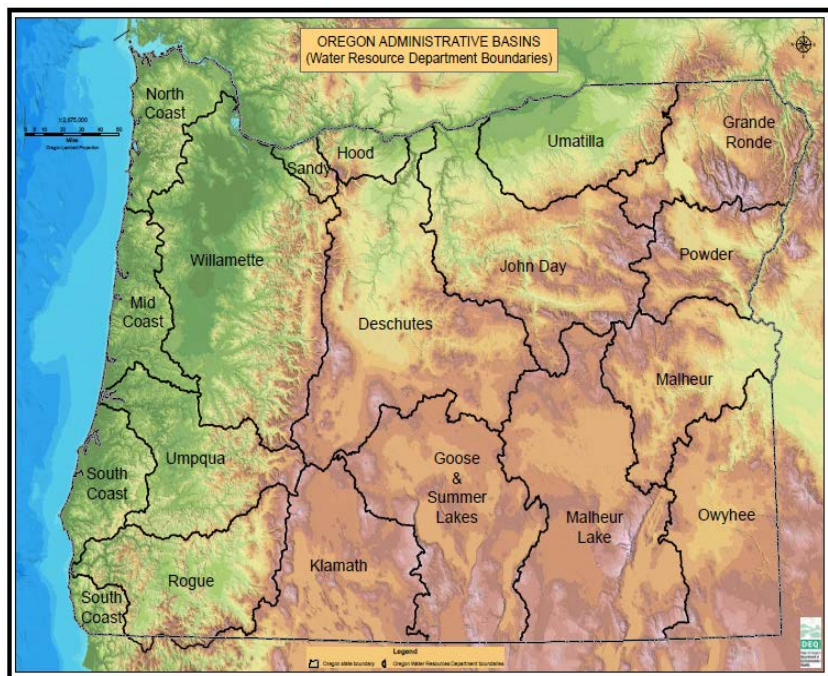
- U.S. Forest Service (USFS) <http://www.fs.fed.us/r6/water/>
- U.S. Bureau of Land Management (BLM) <http://www.blm.gov/or/st/en.html>
- U.S. Fish and Wildlife Service (USFWS) <http://www.fws.gov/oregonfwo/>
- US Army Corps of Engineers (USACE) <http://www.nwd.usace.army.mil/home.asp>

## 2. Oregon's Water Resources

Oregon ranks as the tenth largest state in the nation with its nearly 97,000 square miles. The Oregon landscape is diverse and surface water resources are a major feature of Oregon. The state has over, 6,200 lakes, 9 major estuaries, over 360 miles of coastline, and 111,619 miles of rivers. End to end; Oregon's rivers could circle the Earth four and a half times.

At present, responsibility for managing its water resources is divided between several state agencies that work in an active and effective partnership to protect state waters.

Figure 1. Waterbodies of Oregon



## 3. Oregon's Nonpoint Source Program

### 3.1 Description of NPS Program

Oregon's NPS Program is intended to control or prevent nonpoint source pollution to attain water quality standards and thereby protect the beneficial uses of all state waters. Oregon will promote and support programs and activities that are guided by best available science and implemented through an adaptive management approach. In addition, Oregon will realize these goals by striving for broad community acceptance and involvement.

Oregon's strategy for improving state waters is on a geographic basis. The state has 21 river basins and 91 sub-basins. The state's National Pollutant Discharge Elimination System (NPDES) permitting, assessment, and TMDL work has been aligned and prioritized according to these sub-basins. There are Ground Water Management Area (GWMA) and basin coordinators assigned to each GWMA and basin/subbasin. They take the lead role as GWMA and TMDLs are developed and implemented. The types and extent of water quality impairments, as well as available resources and impediments vary geographically. It is therefore critical to consider GWMA/basin specific conditions and develop local priorities and solution for local problems to achieve water quality improvements.

Section 319 of the federal Clean Water Act requires states to have nonpoint source (NPS) management programs based on assessments of the amounts and origins of NPS pollution in the state. The Coastal Zone Act Reauthorization Amendments (CZARA) required development of additional management measures for NPS within the coastal zone. Nonpoint source pollution comes from numerous diffuse sources such as runoff from roads, forestry operations, on-site disposal, farms and construction sites. This type of pollution is understood to be the largest source of water quality impairment in Oregon, as well as the rest of the United States.

Federal grants cover the majority of cost for Oregon's NPS program, which protects and restores both surface water and groundwater. During the 2012-2014 biennium, DEQ expects to provide close to \$2 million to local organizations for nonpoint source projects such as public education and watershed restoration. Oregon's total 2012 319-Grant allocation of \$2,172,000 was distributed as follows: \$905,000 or approximately 41.7% was directed to the twenty-six (26) 319 projects grant and the remainder, \$1,267,000 or approximately 58.3 %, was directed to the PPA grant to fund 9.45 DEQ staff positions for the NPS program.

In 2012, DEQ made three Clean Water State Revolving Fund (CWSRF) loans totaling more than \$15 million to three (3) nonpoint source projects. Two of those loans went to irrigation districts serving central Oregon. This includes the Farmer's Irrigation District, located in the Hood River watershed which received a \$15 million loan to install large-diameter pipes to replace open conveyance canals to reduce water loss due to ground seepage and evaporation. The second loan went to the Three Sister's Irrigation District in the Upper Deschutes watershed which received a \$100,000 increase to a existing loan to replace open canals with large diameter pipe. In addition to funding irrigation districts, DEQ also provided a \$250,000 loan to Clackamas County Soil and Water Conservation District in Oregon City. The District will use the funds to establish a local loan program to finance small projects that improve the water quality of the Clackamas River watershed.

#### 3.1.1 Baseline Regulatory Statutes

The NPS program relies on the following State of Oregon and federal rules and regulations:

- Federal Clean Water Act.
- Federal Safe Drinking Water Act.
- EPA National Estuary Program.
- NOAA CZARA Section 6217 Coastal NPS Control Program.

- Oregon water quality standards.
- Oregon TMDL rule.
- State and EPA NPS and stormwater pollution control rules.
- Oregon Forest Practices Act.
- Oregon Plan for Salmon and Watersheds.
- Oregon Agricultural Water Quality Act.
- Oregon State Land Use Planning Program, specifically Goal 5 (protection of riparian and wetlands) and Goal 6 (protection of air, water and land resources).
- Oregon Groundwater Quality Protection rules.

### 3.1.2 Non-Regulatory NPS Programs

Oregon's Nonpoint Source Control Program Plan, October 2000, <http://www.deq.state.or.us/wq/nonpoint/plan.htm> identifies the pollution management programs, strategies, and resources that are currently in place or that are needed to minimize or prevent nonpoint source pollution effects. DEQ has the responsibility of overseeing and implementing the States NPS Management Program by coordinating with many local, state, and federal agencies and organizations throughout the State of Oregon. The NPS Management Plan represents the unified effort of many agencies and individuals to outline the various pollution control strategies that are currently taking place or are proposed for future implementation. In addition, category goals and implementation milestones are described for each of the eight EPA designated NPS pollution categories.

Since its inception, Oregon's NPS Program has supported and promoted the collaborative efforts of state, federal, and local agencies as well as private organizations in order to achieve NPS goals. The State of Oregon is committed to implementing an environmentally sensitive program that focuses on the attainment of water quality goals by using a balanced approach of education, research, technical assistance, financial incentives, and regulation. These programs include the management or regulation of forestry, agriculture, grazing, transportation, recreation, hydromodification, marinas, urban development, land use planning, fish and wildlife habitat, riparian and wetlands protection/restoration, public education, water resources, and other activities that affect the quality of the state's waters.

It should be noted that EPA has been working on a guidance document for the states to use to update the NPS Management Program Plans. Oregon plans to revise the NPS Control Program Plan once EPA guidance becomes available.

## 3.2 Program Directions and Priorities in 2012

DEQ continues to implement the NPS Program and direct funding into basins impaired by NPS pollution. In addition, DEQ is continuing to work toward implementation of the watershed approach, which would incorporate the use of the EPA's key watershed planning components with the nine key NPS elements. This includes continued improvement in coordination between the various DEQ Water Quality Programs including NPS, TMDLs, Integrated Report, Source Water Protection, Groundwater, Clean Water State Revolving Fund, and 319 Project Grants.

In addition, DEQ has been working with staff from the Oregon Water Enhancement Board (OWEB), Natural Resource Conservation Service (NRCS), and other funding entities to prioritize and coordinate our efforts to address nonpoint sources of pollution. Development of an Oregon Watershed Approach that would integrate implementation ready TMDL Implementation Plan requirements (Oregon TMDL Rule, OAR 340-042-0025); EPA's Key Watershed Planning Components with Nine Key NPS elements; and drinking water protection program elements is planned. However, one of the major impediments to reducing pollutants from nonpoint sources is that federal funding of the state's Nonpoint Source Program has been at the same level for several years.

DEQ's current Water Quality Program priorities include the following:

1. Working with state, local and national partners on water quality, water quantity and ecosystem protection. DEQ is committed to developing and leveraging partnerships with other agencies and organizations to achieve desired environmental outcomes in the most cost-effective manner.

Examples of this include many of the Nonpoint Source Success Stories that resulted from the coordinated efforts of various agencies, communities, watershed councils and landowners. Water quality trading is another example, such as the City of Medford's wastewater permit, that relies upon the coordinated efforts of The Freshwater Trust and the Willamette Partnership to ensure compliance with permit requirements and costs half as much as a traditional, engineered approach.

These types of partnerships are developing several new or expanded initiatives such as the following: Development of the Implementation Ready Mid-Coast TMDLs requires a significantly higher level of stakeholder engagement to develop enforceable implementation plans that will be incorporated into the TMDLs. Conducting a regional monitoring summit to coordinate and capture data collected by external groups in order to cost-effectively fulfill the data needs of multiple parties. Developing and using Watershed Approach Basin Reports as a platform to engage local stakeholders, such as communities, watershed councils and conservation districts, to find smart solutions to local water quality issues.

2. Working with local communities to protect Oregon's watersheds and provide innovative and efficient wastewater infrastructure. Many small communities throughout Oregon have outdated or failing wastewater collection and treatment system and/or residences with failing onsite systems. In many cases, the cost of repairs and upgrades are well above what the community or homeowner can afford. If not addressed, these failing systems can present human health risks and pollute surface water and groundwater. The Clean Water State Revolving Fund (CWSRF) loan program hired two regional engineers in 2010 who work directly with small communities to ascertain sustainable wastewater infrastructure needs and incorporate feasible approaches, and to identify available financial options available through financing agencies. The CWSRF program is also in the process of a comprehensive rule review that is acknowledging the need to assist small communities, and is incorporating the principle of integrating traditional "gray" infrastructure with "green" or natural infrastructure projects.
3. DEQ plans to work with our stakeholders to promote development of integrated plans based upon EPA's integrated planning framework. Guided by DEQ's basin assessments and local community needs and priorities, implementation will allow communities to address Clean Water and Safe Drinking Water Act program requirements that yield highest environmental and public health benefits with a commitment to meet all regulatory obligations.
4. Supporting and encouraging implementation of clean water action plans (TMDL implementation). In addition to the development of Implementation Ready TMDLs, DEQ is stepping up its efforts in other ways to ensure TMDL implementation measures result in effective implementation of TMDL implementation plans such as:
  - A TMDL Implementation Plan development guidance document for urban and rural residential areas within the Coastal Nonpoint Management Area boundary that will address TMDL responsibilities and new development urban management measures as required by the Coastal Zone Management Act.
  - Working with Oregon Department of Agriculture to develop a comprehensive monitoring and evaluation strategy plan for the Agricultural Water Quality Management Program.
  - During the biennial review of Agriculture Water Quality Management Area plans and rules, working with ODA and the Local Advisory Committee to incorporate meaningful metrics and benchmarks for meeting load allocations into the plans.
5. Monitoring Oregon's water quality to support water quality program needs, identify emerging issues, understand water quality status and trends, and to inform management activities targeted at restoring Oregon's water quality and beneficial uses. DEQ continues to implement elements of the 2005 Strategy for Monitoring Oregon's Waters. Monitor summits with DEQ staff and external partners were held to communicate DEQ's water quality monitoring activities and to gather input on regional and external monitoring priorities to assist with updating the strategy in 2012.
6. The existing monitoring programs that address NPS pollution include, but are not limited to:
  - TMDL Development – Collect data to develop TMDLs for 303(d) listed streams. The data is used for a subbasin scale cumulative effects analysis for the development of the TMDLs.

- Groundwater – Identify areas of groundwater contamination and determine trends in Groundwater Management Areas.
- Large River Ambient – Collect data for long term trending at fixed sites across the state.
- Volunteer Monitoring – Improve data quality collected by third parties and increases the data accessibility for local and state assessments.
- Coastal Environmental / Bacteria Monitoring – Collects data to determine the need for beach advisories.
- Toxics Monitoring - Toxics Monitoring Project for surface waters in watersheds across Oregon. This project will give information about current and emerging contaminants that threaten aquatic life and human health. DEQ toxics monitoring program continues its risk-based screen for toxic contaminants in Oregon's rivers, streams and lakes. Locations are targeted to identify contaminants in water but may include contaminants in stream bed sediment and fish tissue.
- Pesticide Stewardship Partnership - Collaborative approach to monitoring pesticide in agricultural areas. Data identifying current use pesticides found in surface water is shared with growers to help them target management practices that reduce pesticides in water.
- Long term ambient water quality monitoring of conventional pollutants at fixed stations around the state will continue to identify important trends in water quality. The results are communicated to legislators and land use managers to provide important insights into water quality changes and the factors that are contributing to those changes.
- Reduced TMDL monitoring continues to provide data targeted at TMDL development and some effectiveness monitoring.
- Groundwater monitoring continues in groundwater management areas with nitrate concentrations of concern.
- Beach bacteria monitoring is currently ongoing along the Oregon coast to provide data for beach advisories to protect contact recreation. However, proposed elimination of federal funding may jeopardize DEQ's ability to continue this work.
- DEQ continues to participate in the data collection for the National Aquatic Resource surveys for the nation's waters. Sites for the rivers and streams survey will be supplemented to generate a statistically valid sample for an Oregon assessment.
- Facilitate volunteer monitoring activities through trainings, monitoring plan development, quality control checks, and data integration.

### 3.2.1 Prioritization of NPS Activities in 2012

Prioritization of program activities is important to best use Oregon's limited resources for preventing or reducing NPS pollution and improving water quality. In addition, recommendations from a long-term water quality program planning effort were used to help prioritize work.

The following criteria were used to prioritize activities for 2012:

1. Actions that are measurable and achievable – known environmental result.
2. Actions that act as a catalyst to move the NPS Program forward.
3. Actions that can guide other program efforts such as setting policy or developing tools.
4. Actions that enable the program to leverage internal and external resources.
5. Actions that invest in and or develop political will and community support.
6. Actions that develop an internal process to increase efficiency and consistency.
7. Actions that include an ongoing assessment of monitoring and particularly 319 funding for projects that include monitoring.

This prioritization process focused DEQ's NPS efforts in 2012 on agricultural, federal, state, and private forestry land use activities, and the Oregon Coastal Nonpoint Pollution Control Program (CNPCP).

## 4. Nonpoint Source Activities and Accomplishments in 2012

### 4.1 Programmatic – NPS Management and Administration

#### 4.1.1 Performance Partnership Agreement

A portion of DEQ's nonpoint source program activities are funded through the EPA and DEQ Performance Partnership Agreement (PPA). The current PPA is for activities occurring from **July 1, 2012 to June 30, 2014**. This funding used in waters impaired by NPS pollution supports program management, administration, TMDL development and implementation, mainstem Columbia water quality management, and agency coordination.

These funds support **9.45 FTE** positions within DEQ that were involved in the following programs / projects:

- With Oregon's 319-Grant Incremental Funds **26 NPS Projects** were funded.
- Implement TMDLs for NPS in subbasins where TMDLs/WQMPs have been completed, such as the Willamette River and Columbia River Basins.
- Implement the Willamette Mercury TMDL (Phase I) using DEQ's Mercury Reduction Strategy and mercury source characterization work to help identify priorities and strategies.
- Implement strategies for GWMA's with established Action Plans.
- Distribute 319 grants to fund project proposals in Oregon's priority basins based on TMDL implementation, 303(d) listings, GWMA's, and Drinking Water Source Areas.
- Administer 319 Grants.
- Prepare an annual report of NPS program accomplishments.
- Determine with EPA potential NPS success stories documenting either that the water body is meeting WQS or making water quality progress under EPA's national measures.
- Enter GRTS 319 project tracking mandated data elements by national deadlines, including pollutant load reductions, as available.
- Coordinate with the Oregon Department of Land Conservation and Development (DLCD) on the Oregon Coastal Nonpoint Pollution Control Program (CNPCP).
- Coordinate with state and federal natural resource managers on meeting water quality goals and objectives.

DEQ's NPS program also includes staff, which performs the following activities:

- Characterization of NPS problems/concerns.
- Monitoring to support and determine effectiveness of BMP programs.
- Best management practices development/implementation.
- Coordination between stakeholders.
- Liaison support staff to other state and federal agencies.
- Restoration activities.
- Development and modeling for NPS TMDLs.
- Development of UAA)/SSC<sup>1</sup> as related to NPS activities.
- Public education.

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<sup>1</sup> In order to meet the demand for DEQ to remove beneficial uses in some sub-basins or set "site specific" standards (SSC) has increased. The Clean Water Act requires that a Use Attainability Analysis (UAA) be completed before a State may remove a designated use. A similar scientific analysis is needed to develop SSCs.

The following **Table 1** is a compilation and summary of elements 2 and 8 sections from the actual July 1, 2012 to June 30, 2014 PPG Work plan.

**Table 1. July 1, 2012 to June 30, 2014 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component.**

2012-2014 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component		
Number	DEQ Commitment	Outputs
<i>Element 1: Water Quality Standards and Assessments</i>		
<b>1.1</b>	Complete water quality standards revisions for turbidity.	Final recommendations for revised standards for turbidity presented to the Environmental Quality Commission for adoption by 6/2013.
<b>1.2</b>	Technical support for court decision/litigation for temperature standards package. DEQ will provide supporting information as warranted and any other assistance requested by EPA attorneys. Participate in settlement negotiations if warranted.	Implementation of any consent decrees or court orders that require future action by DEQ. Ongoing
<b>1.3</b>	DEQ will provide information as requested by EPA and participate in discussions and negotiations related to ESA consultation and any proposed State conservation measures on DEQ's toxic pollutants criteria for fish and aquatic life. In taking its action, EPA will consider the Biological Opinions.	Letter of approval or disapproval from EPA to DEQ. Any disapproval will include the reasons for the decision and possible remedies or alternatives by 11/30/2012.
<b>1.4</b>	Prepare a description of how Oregon addresses nutrient-related water quality issues in its CWA programs.	DEQ report describing Oregon's approach to addressing nutrients by 7/31/2012.
<b>1.11</b>	Advancing DEQ's watershed approach efforts by synchronizing up the 2014 Integrated Report with the Watershed Approach Basin Reports.	Oregon Integrated Report and Watershed Approach Basin Reports. Ongoing



Table 1. July 1, 2012 to June 30, 2014 Performance Partnership Agreement (Cont.)

2012-2014 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component		
Number	DEQ Commitment	Outputs
<i>Element 2: TMDLS</i>		
2.1	Develop TMDLs and WQMPs in accordance with 303(d) list schedule.	<u>Issuance of TMDLs for the:</u> - Deschutes Basin by 6/12 - Coquille Basin by 3/13 - MidCoast Basins by 6/13  <u>Issuance of TMDLs for the following by 6/14:</u> - Powder/Burnt Basins - Chetco Basin - Sixes Basin  <u>TMDL Revisions for the following:</u> Tualatin Subbasin by 9/12 Upper Klamath and Lost River Subbasins by 10/12
2.3	Implement the Willamette River Basin TMDL. Work with watershed councils, local governments, and other DMAs to develop appropriate management practices and plans for controlling pollutants to the Willamette River. Work with USDA agencies to leverage Farm Bill resources to implement priority best management practices in critical areas.	Completed Implementation plans throughout Willamette Basin that guide management practices, pollutant controls to meet load allocations in TMDLs. Facilitate projects that result in improvements in water quality. Ongoing
2.4	Implement the Willamette Mercury TMDL (Phase I) using DEQ's Agency Toxics Reduction Strategy, Mercury Reduction Strategy and mercury source characterization work to help identify priorities and strategies. Work with stakeholders to identify sources and implement strategies to reduce mercury in the environment. Work with EPA Region 10 to develop and implement Region 10's Mercury Strategy Framework.	Complete characterization of mercury sources in Willamette basin and data required for final modeling. Ongoing

Table 1. July 1, 2012 to June 30, 2014 Performance Partnership Agreement (Cont.)

2012-2014 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component		
Number	DEQ Commitment	Outputs
<i>Element 2: TMDLS (Cont.)</i>		
2.5	Implement TMDLs for Nonpoint Sources in subbasins where TMDLs/WQMPs have been completed. Work with watershed councils, local governments and other DMAs to develop appropriate management practices and plans for controlling pollutants. Work with USDA agencies to leverage Farm Bill resources to implement priority best management practices in critical areas.	Completed Implementation plans that guide management practices, pollutant controls to meet load allocations in TMDLs. Facilitate projects that result in improvements in water quality. Ongoing
2.6	Develop Implementation Ready TMDLs for the Mid-Coast basins.	Completed TMDLs issued as administrative orders that assign load allocations to pollutant sources in the basins by 6/13.
2.7	Implementation of load allocations or require TMDL implementation plans for all sources assigned load allocations.	Implementation plans that meet load allocations or management measures identified in the TMDL/WQMP that meet load allocations by 2013.

Table 1. July 1, 2012 to June 30, 2014 Performance Partnership Agreement (Cont.)

2012-2014 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component		
Number	DEQ Commitment	Outputs
<i>Element 7: WQ Data Analysis, Management and Monitoring</i>		
7.3	Ambient Monitoring Network -DEQ will continue to monitor approximately 130 ambient water quality station 6 times annually throughout Oregon. These stations provide status and trends data for understanding water quality. These stations provide status and trends data for understanding water quality.	<ul style="list-style-type: none"> <li>- Continue entering data into the database.</li> <li>- The Oregon Water Quality Index (OWQI) will continue to be updated annually. Annual reports will be prepared on water quality trends and indicators.</li> <li>- Data will be used to support the 303(d) assessment process.</li> <li>- Data will be used for the 305(b)/Watershed Assessments. By 1/13 and 1/14</li> </ul>
7.4	Collect water quality data to support TMDL development.	TMDL developed on schedule and supported by adequate data. Ongoing
7.5	Conduct 31 site visits in Oregon as part of the National Lakes Assessment.	<ul style="list-style-type: none"> <li>- Provide data for upload to EPA management system.</li> <li>- Use information in the narrative section of the 305(b) report/Watershed Assessments when available. By 10/30/2012</li> </ul>
7.6	Collect water quality, biological data and physical habitat data at 30 sites in an Oregon Basin.	Water quality, biological data and physical habitat available for use in a basin assessment by January 2014
7.8	Revise SOP for evaluating reference sites to incorporate new GIS information.	<ul style="list-style-type: none"> <li>- Document outlining process for evaluating reference sites by 4/14</li> </ul>
7.9	Conduct analysis of water quality data for Watershed Approach Basin Reports and Ag Area Plan & Rule biennial reviews.	Watershed Approach Basin Reports for three basins per year: South Coast, Clackamas/Sandy, Powder/Burnt Basins by 6/30/2013

Table 1. July 1, 2012 to June 30, 2014 Performance Partnership Agreement (Cont.)

2012-2014 Performance Partnership Agreement NPS and 319 Funded Related Water Quality Components		
Number	DEQ Commitment	Outputs
<i>Element 8: Management of Nonpoint Sources of Pollution</i>		
8.1	Distribute 319 grants to fund project proposals to Oregon's priority basins based on TMDL development and implementation, drinking water source areas and GWMA's.	Solicit and select projects during 05/13 and 05/14.
8.2	Prepare an annual report of NPS program accomplishments.	Place on website. The 2010 Annual Report was submitted by DEQ and approved by EPA. The report is on DEQ's website during 03/13 and 03/14.
8.3	Determine with EPA available NPS Success Stories documenting either water quality progress or full restoration under PAM.	NPS Success Stories during 9/12 and 9/13
8.4	Enter GRTS 319 mandated elements to 319 project tracking data by national deadlines, including load reductions as available.	Data reflecting progress and status of 319 implementation by 2/13, 2/14 load reduction, other GRTS data (National GRTS reporting deadlines).
8.5	Work with EPA to review TMDLs and other basins plans for meeting EPA's 9 Key Element watershed based planning guidance.	Develop strategies to leverage current resources for development of a watershed framework that integrates TMDLs and NPS Programs and is consistent with EPA's 9 Key Elements watershed plan model. Inform DEQ HQ and Regional staff about the Watershed Framework and the linkages between the various DEQ Water Quality subprograms. Develop conceptual model for management practice reporting system for implementation monitoring of WQMPs by 6/13.
8.6	Develop BMPs and other measures/rules to address NPS pollution from forestry, new developments, and on-site disposal within the Coastal Zone.	Outstanding conditions related to Oregon's Coastal NPS Pollution Control Plan are addressed.
8.7	Develop Agency Toxics Reduction Strategy.	A toxics reduction strategy that incorporates air, land and water by 06/30/13.
8.8	Prepare an update to the 2000 Oregon NPS Management Plan.	Complete an updated Oregon NPS Management Plan; (Draft) NPS Plan Update 6/13, (Final) NPS Plan update 9/13

## 4.2 Use of Incremental vs. Base Funds

Oregon's total 2012 319-Grant allocation of \$2,172,000 was distributed as follows: \$905,000 or approximately 41.7% was directed to the twenty-six (26) 319 projects grant and the remainder, \$1,267,000 or approximately 58.3 %, was directed to the PPA grant to fund 9.45 DEQ staff positions for the NPS program.

**Table 2. Breakdown of Oregon's 2012 Section 319 Allocation from EPA**

BREAKDOWN OF OREGON'S 2012 SECTION 319 ALLOCATION FROM EPA			
Area	Fiscal Year 2012 Enacted	Incremental Funds	Base Funds
Region 10	\$9,025,000	\$5,767,000	\$3,258,000
<b>Oregon</b>	<b>\$2,172,000</b>	<b>\$1,388,000</b>	<b>\$784,000</b>

**Table 3. 2012 Oregon's 319 Grant Incremental and Base Funds Use: Funded Positions / NPS Program Activities**

2012 OREGON'S 319 GRANT INCREMENTAL AND BASE FUNDS USE: FUNDED POSITIONS / NPS PROGRAM ACTIVITIES			
Fund	Dollar Amount	Percent	Use
Base Funds (\$784,000) + Incremental Funds (\$483,000)	\$1,267,000	58.3 %	9.45 DEQ Staff Positions
Incremental Funds	\$905,000	41.7 %	26 Projects
<b>TOTAL</b>	<b>\$2,172,000</b>	<b>100.0 %</b>	<b>--</b>

### 4.2.1 Base Funds

Oregon's "base funds" supports 9.45 positions within DEQ on the following programs:

- TMDL Development.
- TMDL Implementation.
- Update Oregon's 319 Grant Guidelines.
- Distribute 319 Grants For Projects.
- 319-Grant Administration and GRTS reporting of 319 activities.
- Annual NPS Report.
- NPS Success Stories.
- NPS Load Reductions.
- Columbia Water Quality Management.
- Oregon Coastal Nonpoint Pollution Control Program (CNPCP).
- State and Federal Coordination.

The following **Table 3** identifies how the PPG Base Funds dollars and FTE were used in 2012 to support the various NPS program activities:

**Table 4. 2012 Oregon's 319 Grant Funded Positions and NPS Program Activities Costs**

<b>2012 OREGON'S 319 GRANT FUNDED POSITIONS / NPS PROGRAM ACTIVITIES</b>	<b>FTE</b>	<b>Dollars</b>
<b>NPS TMDL Modeler</b>	<b>1.00</b>	<b>\$122,690</b>
<b>Regional NPS Staff (Incl. 0.50 FTE NPS TMDL Development)</b>	<b>3.00</b>	<b>\$362,641</b>
<b>Volunteer Monitoring Coordinator</b>	<b>1.00</b>	<b>\$141,032</b>
<b>Prorates and Management and Administrative Support (Includes 0.25 FTE in Regions and 0.20 FTE at HQ)</b>	<b>0.45</b>	<b>\$60,967</b>
<b>Grant Administration</b>	<b>1.00</b>	<b>\$136,941</b>
<b>Columbia Basin Coordination</b>	<b>1.00</b>	<b>\$152,764</b>
<b>Nonpoint Source Coordination</b>	<b>2.00</b>	<b>\$281,054</b>
<b>Attorney General</b>	<b>--</b>	<b>\$8,911</b>
<b>TOTALS</b>	<b>9.45</b>	<b>\$1,267,000</b>

DEQ's use of the "base" 319 funds meets EPA's guidelines in supporting state 319 programs and projects. States may use the base funds for the full range of activities addressed in their approved nonpoint source management programs. EPA allows states to use up to 20% of the base funds to develop NPS TMDLs (consistent with their TMDL development schedule) and watershed-based plans to implement NPS TMDLs; develop watershed-based plans in the absence of or prior to completion of TMDLs (incorporating the TMDL's load allocations once it has been completed and approved); develop watershed-based plans that focus on the protection of threatened waters, source water, or other high-priority unimpaired waters; and conduct other NPS monitoring and program assessment/development activities. (Monitoring the results of implementing a watershed project is not subject to this 20% limitation.)

#### 4.2.2 Incremental Funds

In 2012, the \$905,000 319-Grant of "incremental funds" funded 26 projects in four areas of emphasis :

- TMDL Implementation (57.2%)
- BMP Implementation (22.4%)
- Pesticide Stewardship (11.1%)
- Information and Education (9.3%)

Incremental funds are restricted, per EPA's 319 guidance, but are principally to be used to develop and implement watershed-based plans that address nonpoint source impairments in watersheds that contain Section 303(d)-listed waters. States may use up to 20% of incremental funds to develop NPS TMDLs, watershed-based plans to implement NPS TMDLs, and watershed-based plans in the absence of or prior to completion of TMDLs in Section 303(d)-listed waters (incorporating the TMDL's load allocations once it has been completed and approved). Note that "BMP Implementation" did not include implementation of BMPs identified in a TMDL Implementation Plan and "TMDL Implementation" primarily focused on effectiveness monitoring.

## 4.3 Project Implementation (2012 Activities)

### 4.3.1 Assessing Oregon's Basins

DEQ coordinates its work to protect and improve Oregon's water by following the watershed approach. DEQ uses the term "watershed" to describe an area of land that contains related waterways. These watersheds may be traditional basins, areas that drain into a single waterway or an area that contains similar waterways, such as a group of coastal rivers.

To help protect, improve and enhance the quality of Oregon waterways, DEQ conducts in-depth assessments of the state's basins. These assessments take the form of local water quality status and action plans, which describe water quality conditions and include recommendations for actions that DEQ and others who are interested in these basins can take to improve water quality.

The DEQ water quality program has increased its emphasis on the "watershed approach" as a way to better identify and address high priority water quality issues in a basin or region. The watershed approach combines the expertise of DEQ's 17 water quality sub-programs to produce basin-based assessments that are data-driven and contain quantitative elements that describe water quality conditions and include recommendations for actions that DEQ and others can take to improve water quality.

DEQ uses these assessments to work with local stakeholders, such as communities, watershed councils and conservation districts, as well as local, state and federal agencies, to find smart solutions to local water quality issues. The watershed approach allows opportunities for direct, interactive feedback between DEQ and its many stakeholders.

The watershed approach framework is being used by DEQ to not only improve water quality throughout Oregon, to not only help protect drinking water, fish habitat and the environment in general, but can also boost Oregon's economy. A clean and more dependable water supply is good for industry, promotes healthier commercial and recreational fisheries, and encourages tourism. Clean waterways also help ensure that Oregonians of all ages have safe places to swim and play.

The watershed approach follows the principle of adaptive management, which uses the best information available to take action on immediate problems. It also involves taking any new information to improve practices over time.

This "continuous improvement" process allows DEQ to:

1. Share its findings with affected stakeholders and residents, so all parties learn how to better manage our watersheds.
2. Prioritize immediate and long-term actions that can be taken in a particular basin or watershed, through DEQ's Water Quality Status and Action Plan documents. These actions will emphasize working closer with all affected parties to identify goals and measure success.
3. Encourage all involved to be flexible and open to new ways of solving problems (including voluntary collaboration where possible) and avoiding duplication of efforts.
4. Regularly assess the situation in each basin, to determine in an outcome-based approach what is working and what is not.

DEQ plans to cover the state's major basins in the next few years and then re-visit each to mark progress and reassess how to deal with lingering water quality problems.

- DEQ completed its first three Watershed Basin Status and Action Plans in 2011 (See Section 4.5.7 for more detail).

4.3.2 NPS Projects Funding by Basin/Subbasin

SEE APPENDIX O FOR FULL LIST OF 2012 NRCS, 319, OWEB, CWSRF, AND DWSRF FUNDED WATER QUALITY PROJECTS BY BASIN/SUBBASIN

(Example)

Commented [A1]: You can't just put a table in a new section without any narrative explaining what this is about, write up a couple of sentences explaining.

FUNDING SOURCE	SUBBASIN_HUC	YEAR	PROJECT NAME/ ACTIVITY	SUBBASIN_ACTUAL	BUDGET
NRCS EQIP	17050110	2012	Irrigation Pipeline Upland (agricultural BMPs)	Alsea, Siletz-Yaquina	\$13,894
319	17050110	2012			
OWEB	17050110	201			
CWSRF	17050110	2012			
DWSRF	17050110	2012			
NRCS EQIP	17050111	2012			
319	17050111	2012			
OWEB	17050111	2012			
CWSRF	17050111	2012			
DWSRF	17050111	2012			



### 4.3.3 Total Maximum Daily Loads

#### Total Maximum Daily Loads (TMDLs) and Water Quality Management Plans

The federal Clean Water Act requires that water pollutant reduction plans, called TMDLs, be developed for waterbodies that do not meet water quality standards. TMDLs describe the maximum amount of pollutants from municipal, industrial, commercial and surface runoff sources, including natural background, which can enter the river or stream without violating water quality standards. These estimates are required for waterbodies that have been identified as not meeting one or more water quality standards and have been included in Category 5 of the Integrated Report for Oregon (303(d) List).

TMDLs describe the amount of pollutant a waterway can receive and meet water quality standards. TMDLs take into account the pollution from all sources, including discharges from industry and sewage treatment facilities; runoff from farms, forests and urban areas; and natural sources such as decaying organic matter or nutrients in soil. TMDLs include a margin of safety to account for uncertainty. They may include a reserve capacity that allows for future discharges to a river or stream. DEQ develop TMDLs on a watershed and reach basis depending on the impairments and attempts to address all 303(d) listed impairments for that watershed.

Federal law requires that streams, rivers, lakes, and estuaries that appear on the 303(d) list have a TMDL developed in order to meet state water quality standards. In most cases, rivers and streams receive discharges from both point and nonpoint sources of pollution.

#### Process for TMDL Development:

1. Review existing data and monitor to determine the type and amount of pollutants that are causing water quality problems. The review and monitoring attempts to determine how much of the pollution comes from point sources, nonpoint sources, including natural sources such as wildlife.
2. Use techniques such as water quality or watershed modeling to determine what effect the pollution is having on the stream or river and how much of the pollutant can be discharged without exceeding water quality standards.
3. Use this information to establish waste load allocations for point sources (the amount of pollutant the permitted source is allowed to discharge which will be incorporated into NPDES permits) and load allocations for nonpoint sources, which are, implemented through TMDL Implementation Plans, Agricultural Area Rules and Plans, Forest Practices Act Best Management Practices, Water Quality Restoration Plans, and other planning documents.
4. DEQ develops TMDLs on a basin or subbasin scale (generally on a 3<sup>rd</sup> field US Geological Survey Hydrologic Unit Code or smaller).
5. Staff in the program conducts all facets of work in collecting, analyzing, and presenting results. Staff will also perform public and stakeholder outreach to ensure input when decisions are being made. The combination of outreach and development provides for the transition from development of loading capacity, allocations, and implementation in permits and planning documents, such as TMDL Implementation Plans.

TMDL Wasteload Allocations are implemented through effluent limits in permits for point source discharges, and Load Allocations are implemented as planning targets for designated management agencies and other sources.

DEQ staff actively implements TMDLs by:

- Revising industrial and municipal wastewater permits to incorporate revised permit limits.
- Working with local communities and the Oregon Department of Agriculture through the Agriculture Water Quality Management Act process to implement the TMDLs effectively on agricultural lands.
- Working with the Oregon Department of Forestry for implementation on state and private forestlands, through the Oregon Forest Practices Act and long range management plans.
- Working with ODA and ODF on quantifying the effectiveness of BMPs to reduce pollutants, such as sediment, temperature, nutrients and bacteria.

- Assisting local governments in developing TMDL Implementation Plans for urban and rural residential areas.
- Working with the U.S. Forest Service, Bureau of Land Management and other federal agencies on developing water quality restoration plans for lands under their jurisdiction.

Under most circumstances, TMDL Implementation plans for improved water quality rely on cooperation among landowners and land managers within a river basin. Local watershed councils, Soil and Water Conservation Districts, or other organizations will serve as community-based coordination points for these united efforts. Agencies and municipalities with jurisdiction over sources of nonpoint source pollution and sources not covered by permit are required to submit TMDL implementation plans to DEQ. These plans describe actions that will be taken to reduce their contribution of the TMDL pollutant.

In 2012, EPA approved the Upper Klamath and Lost River Subbasins TMDL for dissolved oxygen, chlorophyll a, and pH. DEQ is currently reconsidering this TMDL. DEQ issued a TMDL for the Tualatin Subbasin, amending the 2001 TMDL, to provide waste load allocations for total phosphorus and ammonia at two new discharge locations. EPA approved this revised TMDL in December 2012.

#### 4.3.3 Water Quality Standards

Establishing water quality standards for waters of the United States in Oregon is at the core of DEQ's water quality activities. Standards include beneficial uses of water, such as drinking, aquatic life, recreation, etc., and the water quality criteria designed to protect those uses. The Water Quality Program then acts to protect and restore water quality by implementing those standards, including evaluating whether Oregon's water quality standards are being met through the development of the biennial Integrated Report, which includes the section 303(d) list of impaired waters and the section 305(b) report describing the status of Oregon's surface water quality.

The staff who work on these program areas perform the following activities:

- Conduct triennial standards reviews to establish and update scientifically based water quality standards and related policies.
- Develop and maintain internal directives for and provide guidance to regional and headquarters staff on implementation of water quality standards in various water programs.
- Identify waterbodies not meeting water quality standards and develop Integrated Reports that are linked to the Watershed Approach Basin Reports.

In 2012, DEQ piloted an approach to develop its Integrated Report that supports and is linked to its Watershed ~~Approach Basin Reports~~ Basin Status and Action Plans. DEQ has made these efforts a priority in order to guide the agency's efforts to help protect, improve and enhance the quality of Oregon waterways. The objective of linking the Integrated Report efforts with the Watershed Basin Status and Action Plans ~~Watershed Approach Basin Reports~~ is to ensure that these efforts, together, provide a comprehensive evaluation of water quality and other environmental information resulting in a basin-based water quality status and action plans. In addition, this approach will result in DEQ being able to make the most efficient use of its staff resources.

At least once every three years, Oregon is required to review its water quality standards and submit any new or revised standard to EPA for review and approval. The Oregon water quality standards, including the narrative and numeric criteria, are contained in Chapter 340, Division 41 of the Oregon Administrative Rules, [http://arcweb.sos.state.or.us/pages/rules/oars\\_300/oar\\_340/340\\_041.html](http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_041.html). The associated tables and figures and additional information may be found on DEQ's water quality standards web page at: <http://www.deq.state.or.us/wq/standards/standards.htm>.

On June 16, 2011 the OR EQC adopted more stringent water quality standards for toxic pollutants affecting human health. EPA Region 10 approved these standards on Oct. 17, 2011. During 2012, DEQ has been developing guidance and procedures and beginning to implement the new standards.

In April 2012, the EQC adopted revised water quality standards for the West Division Main Canal, a man-made irrigation canal near Hermiston, Oregon. DEQ completed a Use Attainability Analysis, corrected the designated uses of the canal and revised the water quality criteria to protect the new uses.

In addition in 2012, DEQ has been working on responding to litigation on the state's 2003 temperature standard (the judge just issued an order on this last week—talk to Deb if you want to include this info...). On Jan. 31, 2013, EPA took action on Oregon's aquatic life toxics criteria submitted in 2004. EPA approved criteria associated with 14 pollutants and disapproved criteria associated with 16 pollutants. DEQ anticipates conducting several rulemakings to address the disapproved criteria.

#### 4.3.4 Cross Program Efforts to Address Toxic Chemicals

##### DEQ Toxics Reduction Strategy

DEQ is developing a comprehensive, integrated approach to address toxic pollutants in the environment. An integrated approach is essential because these pollutants readily transfer from one environmental media to another (e.g., mercury can be released to the air, deposit on the land, and run off to the water). DEQ's cross-media toxics reduction strategy will help ensure that DEQ is addressing the problem of toxics in the environment in the most effective and efficient way.

The objectives of this strategy are to:

1. Optimize agency resources by focusing on the highest priority pollutants in a coordinated way.
2. Implement actions that reduce toxic pollutants at the source.
3. Establish partnerships with other agencies and organizations to increase the effective use of public and private resources.
4. Use environmental outcome metrics to measure the effectiveness of strategy implementation where feasible.

The Draft Strategy information is now available for public review. A short summary of the Draft Toxics Reduction and Assessment Actions, and a document providing more detailed (1-2 page) descriptions of each of the draft actions can be found on DEQ's Toxics Reduction web page:  
<http://www.deq.state.or.us/toxics/index.htm>.

##### General Permits for Pesticides

Pesticide applications that result in the discharge to waters of the state from the use of biological pesticides or chemical pesticides that leave a residue require an NPDES permit. The need for the permit resulted from federal court decision requiring permits for pesticide applications in, over or near water.

The Pesticide General Permit 2300A includes pesticide application for Mosquito and Other Flying Insect Pest Control, Weed and Algae Control, Nuisance Animal Control, Forest Canopy Pest Control, and Area-wide Pest Control. These permits affect about 1,500 entities that decide to apply pesticides or have day-to-day control over pesticide application. These entities include weed control districts, vector control districts, golf courses, lake and marina managers, public utilities, property owners and federal, state and municipal agencies who apply pesticides in, over or near water.

The proposed 2000-J general permit regulates the use of pesticides for weed and algae control within irrigation system boundaries. Weed and algae control is the application, by any means, of contact or systemic herbicides to control vegetation and algae in the water and within 3 feet of water. Irrigation systems that may need to register for this permit include: Irrigation districts formed under ORS Chapter 545, Irrigation districts or companies previously covered by an individual NPDES permit for the application of aquatic pesticides in irrigation systems, or entities, such as, individual farmers, cooperatives or private companies that operate irrigation systems when pesticide applications in the irrigation system or at the water's edge exceed an total treatment area of 20 acres of surface area or 20 linear miles in a calendar year.

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The proposed 2000-J general permit does not apply to pesticide applications to dry land. NPDES permits do not apply to agricultural stormwater discharges and irrigation return flow from irrigated agriculture because these are excluded from permitting under the Clean Water Act. Extended public comment period for the proposed 2000-J general permit closed on Sept. 28 and will be available prior to the 2013 pesticide application season.

These general permits do not cover the discharge to a water body that has been identified as water quality limited on the 303(d) list for a pesticide, its chemical residual or degrades when a waste load allocation for the relevant pollutant parameter does not exist. A discharge to a water quality limited water body may require an individual permit with more detailed site-specific evaluation that results in additional technology-based and/or water quality-based effluent limitations.

More information on these permits is available at this DEQ web site.

<http://www.deq.state.or.us/wq/wqpermit/pesticides.htm>

### Pesticides Stewardship Partnerships (PSPs)

Since 1999, DEQ has been using a voluntary, collaborative approach called PSPs to identify problems and improve water quality associated with pesticide use. The PSP approach uses local expertise in combination with water quality sampling and DEQ's toxicology expertise to encourage and support management measure changes that lead to measurable pesticide detection reduction in surface water.

The key elements of the PSP approach include:

- Use stream monitoring to identify local, pesticide-related water quality concerns,
- Share results early and often with partners in the watershed,
- Explain data in terms of the effects of pesticides on the health of streams,
- Engage the agricultural community and other pesticide user groups in identifying and implementing solutions, and
- Use ongoing effectiveness monitoring to measure success and provide feedback to support water quality management.

DEQ has not been able to secure permanent funding for the PSP program, however, 319 funds have been used to continue monitoring and outreach by local PSP partners. In addition, a proposal for more stable, long-term funding has been presented to the 2013 Oregon Legislature for consideration.

In 2009, DEQ expanded the number of pesticides included in its laboratory analytical suite from 12 to approximately 100. These increased lab capability allows DEQ to gain a more comprehensive understanding of the pesticide stressors in local waterbodies. Although many of these newly monitored pesticides do not have in-stream water quality criteria, the EPA Office of Pesticides has established aquatic life benchmarks that can assist DEQ and others in assessing the potential effects of pesticides detected.

In 2012, PSP work continued in Eastern Oregon with partners in Hood River and Walla Walla River Watersheds, as well as watersheds in Wasco County. Outreach efforts continued to be focused on communicating PSP monitoring results and providing technical assistance to orchards. Preliminary 2012 monitoring data shows significant reductions in concentrations of diuron (herbicide) in the Walla Walla Watershed and malathion (insecticide) in Wasco County watersheds. In addition, levels of almost all pesticides in the Hood River Watershed remain well below relevant criteria or benchmarks.

In 2012, DEQ continued PSP work with partners in four watersheds in the Willamette Valley: Clackamas, Pudding, and Yamhill River, and Amazon watersheds. The monitoring locations in these watersheds are located in a range of agricultural, urban and forested areas.

The diverse array of land uses in the Willamette Valley, creates a major challenge for DEQ and its partners in achieving short-term improvements in water quality related to pesticide use because of the multitude of entities that need to be engaged in the process. However, the partners in the Willamette PSP projects plan to focus future outreach and technical assistance efforts on smaller portions of the watersheds where stream concentrations of pesticides are the highest, thereby allowing for more intensive actions that can produce

measurable water quality improvements in the highest priority areas of a watershed. These activities can then be expanded to other parts of the watershed as appropriate.

The following are a few examples of outreach efforts that rely on PSP monitoring results:

- PSP partners have been able to obtain funding to provide technical assistance in PSP basins due, in part, to PSP data indicating water quality concerns from pesticides use.
- Numerous presentations have been given by DEQ and PSP partners to pesticide applicators, basin natural resource personnel, and growers about PSP monitoring results.
- Local partners identified priority areas for technical assistance based on PSP monitoring results.

## Oregon Nonpoint Source Annual Report 2012

### Water Quality Pesticide Management Team (WQPMT)

The Water Quality Pesticide Management team (WQPMT) is an inter-agency team composed of representatives from DEQ, ODA, DHS, and ODF. The WQPMT was formed to coordinate, communicate, support, and facilitate water quality protection programs, within the four agencies, related to pesticides in the State of Oregon. The WQPMT operates under a Memorandum of Understanding (MOU) established in 2009. ODA is the lead coordinating agency under the Environmental Protection Agency (EPA) - ODA Consolidated Pesticide Cooperative Agreement.

Current WQPMT Participants include the following State of Oregon departments and university:

- Department of Agriculture.
- Department of Forestry.
- Department of Human Services.
- Department of Environmental Quality.
- Oregon State University.

The following WQPMT tasks were completed in 2012:

- The WQPMT reviewed pesticide monitoring data in the context of EPA OPP Aquatic Life Benchmarks, which are used as a screening tool to evaluate monitoring data for pesticides of interest and pesticides of concern when numerical Water Quality Standards are unavailable.
- Evaluated 2011 pesticide monitoring data.
- Established 2012 Pesticides of Concern (POCs): azinphosmethyl, carbaryl, chlorpyrifos, diuron, ethoprop. Established 2012 Oregon Pesticides of Interest (POIs) to review: 2,4-D, atrazine, imidacloprid, metolachlor, metribuzin, metsulfuron-methyl, propiconazole, simazine, and sulfometuron-methyl.
- Coordinated activities with the Pesticide Stewardship Partnerships (PSPs). Involved in the planning and implementation of the PSPs. The PSPs are the primary source of monitoring data that are evaluated by the WQPMT.
- Ongoing coordination between the WQPMT (as a key stakeholder) and DEQ's toxic reduction programs, the newly proposed NPDES stormwater permit requirements and the Umatilla Basin artificial recharge feasibility project.
- NRD WQ staff continues to incorporate pesticide-related tasks (e.g. monitoring, outreach, coordination with PSPs, etc.) into SWCD scope of work contracts.
- Initiated discussions to help coordinate future pesticide monitoring efforts by DEQ and other local stakeholders.
- Numerous presentations to pesticide applicators, water basin personnel and growers regarding the WQPMT and issues we all face around the potential impact of pesticide use on the State's water quality.
- Held regularly scheduled WQPMT meetings to provide agency updates and for coordination.
- Continued communication among team members regarding changes in (1) pesticide label language on buffer requirements, (2) the impact of the NMFS rulings and EPA's actions on new use requirements under the Endangered Species Act, and (3) possible impacts of new NPDES permitting requirements for aquatic herbicides and mosquito abatement insecticides.
- Continued seeking consistent and relatively long-term sources of funding for pesticide monitoring programs.

Future Challenges:

- Expansion and coordination of PSP-type monitoring programs; integrated into overall WQPMT member activities. Expansion should include urban pesticide use and groundwater monitoring efforts.
- Determine ways of prioritizing allocation of limited pesticide monitoring and outreach resources at a smaller scale in watersheds.
- Possibly expand scope of WQPMT to include legacy pesticides and fertilizers.
- Watershed vulnerability assessments and prioritization.
- Coordination of state agencies in implementing management activities described in the PMP especially based on the assessment of monitoring data using the established Response Matrix.
- Standardize reporting of monitoring data and WQPMT assessments and recommendations.
- Develop consensus on how to assess the presence of mixtures in monitoring samples.
- Actively engage in policy discussions/decisions regarding the coordination and overlap of CWA-FIFRA issues.
- Minimize duplicate work by coordinating with TMDL, PSP and other management and monitoring efforts.
- Continue coordination with various DEQ toxics programs: Oregon Toxics Reduction Strategy.
- Continue to maintain and build communication between each agency's water quality programs and key stakeholders.
- Continue outreach, communication, and maintenance of interest/resources on pesticide impact on water quality.

- Pursue additional partnership opportunities with OSU.

**4.3.5 Clean Water State Revolving Fund**

The number of nonpoint source projects funded by DEQ’s Clean Water State Revolving Fund (CWSRF) program continues to grow. Since the loan program’s inception in 1989, DEQ has provided \$75 million for various nonpoint source projects.

In 2012, DEQ made three loans totaling more than \$15 million to nonpoint source projects. Two of those loans went to irrigation districts serving central Oregon. Farmer’s Irrigation District, located in the Hood River watershed received a \$15 million loan to install large-diameter pipes to replace open conveyance canals to reduce water loss due to ground seepage and evaporation. Three Sister’s Irrigation District in the Upper Deschutes watershed received a \$100,000 increase to a existing loan to replace open canals with large diameter pipe.

In addition to funding irrigation districts, DEQ also provided a \$250,000 loan to Clackamas County Soil and Water Conservation District in Oregon City. The District will use the funds to establish a local loan program to finance small projects that improve the water quality of the Clackamas River watershed.

**2012 Clean Water State Revolving Fund NPS Project**  
**Three Sisters Irrigation District, Sisters OR, Whychus Creek, Upper Deschutes Basin. Project**  
**purpose: Replace open ditch irrigation canal with underground pipe to reduce water loss and**  
**increase the dedicated flow to the creek.**



**Wychus Creek restoration work, from just below diversion point.**





Table 5. 2012 State Revolving Fund Activity on Nonpoint Source Projects

STATE REVOLVING FUND ACTIVITY ON NONPOINT SOURCE PROJECTS 2012										
SRF Loan #	Watershed	Project Title	Calander Year	SRF Borrower	Loan Amount	Disbursements To Date	Remaining to Disburse	Project Status	Project Officer	Project Completion
R22405	CLACKAMAS RIVER WATERSHED	Agricultural stream protection	2012	Clackamas Soil and Water Conservation District	\$250,000	\$0	\$250,000	Not Started	Tiffany Yelton-Bram	June 2014
R32244	HOOD RIVER WATERSHED	Replace open irrigation ditch with piping	2012	Farmer's Irrigation District	\$15,000,000	\$24,800	\$14,975,200	Under Construction	Shanna Bailey	December 2015
R91412	UPPER DESCHUTES WATERSHED	Replace open irrigation ditch with piping	2012	Three Sisters Irrigation District	\$100,000	\$100,000	\$0	Complete	Shanna Bailey	May 2012
TOTAL					\$15,350,000	\$124,800	\$15,225,200			

#### 4.3.6 Drinking Water Protection

Approximately 75% of Oregon's citizens get their drinking water from public water systems. Oregon's drinking water protection program works to implement strategies ensuring the highest quality water is provided to the intakes and wells. Mandated by the 1996 Federal Safe Drinking Water Act (SDWA), Source Water Assessments have been completed for all public water systems that have at least 15 hookups, or serve more than 25 people year-round. These assessments include identification of risk associated with the land management activities in the source water areas. Refer to DEQ's drinking water website for more information on the assessments: <http://www.deq.state.or.us/wq/dwp/dwp.htm>.

The data generated from the Source Water Assessments (SWA) that were performed from 2000 through 2005 continues to be of use to the NPS Program and is readily accessible by others. It is utilized to assist other DEQ programs identify priority areas for permit modifications, inspections, technical assistance and cleanup. It has been provided to several other state and federal agencies including Oregon Emergency Response System, Oregon Department of Transportation, ODF, ODA, DLCD, Oregon State Marine Board (OSMB), Oregon Water Resources Department (OWRD), United States Forest Service (USFS), USDA, and the BLM to facilitate incorporation of protection strategies into their respective programs.

Both maps and downloadable statewide GIS shape files of drinking water source area coverages and identified potential sources of contamination are available to the public on the DEQ Drinking Water Protection website at <http://www.deq.state.or.us/wq/dwp/dwp.htm>. The drinking water source areas can also be identified (and selected as a search criteria) for both DEQ's Facility Profiler (a location based system showing DEQ permit holders and cleanup sites) and LASAR (DEQ's Laboratory Analytical Storage and Recovery for air and water quality monitoring data).

The SWA data is also available from other Oregon websites, including the Oregon State University (OSU) Institute for Natural Resources and the Oregon Geospatial Data Clearinghouse. DEQ receives an average of 3-4 requests for data every month from local governments, federal contractors, and consultants. GIS shape files and coverages are provided when effective security of the data is provided.

The inventories of point and nonpoint contaminant sources within the drinking water source areas provide useful information as the community or agencies evaluate the risks and prioritize protection strategies. Typical contaminant sources identified in groundwater source areas include high-density housing, septic systems, auto repair shops, gas stations, irrigated crops, managed forestland, grazing animals, and transportation corridors. Typical contaminant sources identified in surface water source areas include managed forestland, irrigated crops, grazing animals, residential land uses, and transportation corridors.

DEQ developed a BMPs database for the 88 most common potential contaminant sources for drinking water in Oregon (available under "technical assistance" in DEQ's Drinking Water Program (DWP) website). The database provides activities that range from educational outreach to regulatory approaches that public water systems or communities can take to reduce their risk. The database can be used to pull the BMPs for a public water system or geographic area from our GIS layers into a format that communities can use to choose their drinking water protection strategies for groundwater or surface water. Many of these BMPs address nonpoint sources of pollution.

DEQ's nonpoint source specialist for drinking water regularly assists the DEQ Nonpoint Source program with forestry and agriculture issues, provides reviews of NPS program efforts, and participates in committees working to improve the Oregon Forest Practices Act (FPA) rules for stream protection benefiting fish and drinking water, especially in Oregon Coast Range. Staff reviewed the technical basis for turbidity standard revisions, participated as part of Internal Review Team, and wrote a draft document detailing drinking water protection options for private forestlands. Please refer to the RipStream discussion in the "Water Quality Issues on State and Private Forest Land" section of this report.

## Examples of Nonpoint Source Coordination

### Coordination with State and Federal Agencies.

DEQ continues to work with other state and federal agencies to raise the profile of the need for drinking water protection in Oregon, including the ODA, ODF, USFS, USDA NRCS, and the BLM. SWA data has also been provided to several other state agencies to facilitate incorporation of protection strategies into their respective programs.

### Association of Drinking Water Administrators Nutrients Group.

DEQ's drinking water protection coordinator continues to participate in the Association of Drinking Water Administrators (ASDWA) national nitrate/nutrients advisory committee and assists ASDWA in preparing guidance and comments for public water systems.

### US Highway 36 Project.

DEQ in coordination with other state agencies continues to work on pesticide exposure concerns in the US Highway 36 area near Triangle Lake. DWP staff work includes communicating with residents, mapping potential sample locations, developing a Sampling and Analysis Plan, and participating in multi-agency coordination meetings.

### Coordination with TMDL Forestry Issues:

Oregon's drinking water protection program works closely with the TMDL program on nonpoint source issues that affect drinking water sources. This includes research for addressing forestry, landslide, and road-related sediment problems; leading and soliciting feedback from the Mid Coast TMDL Sediment Technical Working Group made up of local stakeholders and experts on the approach for addressing forest, agricultural, and public roads; and meeting with the Mid Coast TMDL Sub-Groups for Forest, Agricultural, and Public Roads to devise road condition metrics and reporting to guide and verify improvements, timelines for road repairs and upgrades, and required performance goals for roads in relation to water quality.

### Variance for Portland's Bull Run Watershed.

Oregon Health Authority's Public Health Division granted a variance in May 2012 to the requirement that the City of Portland treat Bull Run source water for *Cryptosporidium*. The final order granting the variance to the federal and state requirement for treatment contains important conditions to provide safeguards to protect the health of Oregonians being served by unfiltered Bull Run water. OHA, the Oregon Department of Justice, and Oregon Department of Environmental Quality performed the review of the variance request, including assessment of the law, the science, the data and the watershed. The weight of the present scientific evidence led to the decision. OHA held a public hearing and accepted comments during two public comment periods after releasing its proposed order in November. DEQ staff assisted in developing the monitoring requirements and watershed protection conditions.

### Irrigon Regional Water Sampling and Protection.

The City of Irrigon developed new public water system groundwater wells in 2007 to replace wells lost due to nitrate contamination. The two new wells are shallow and located near the Columbia River. Water quality tests on the new wells immediately showed the presence of nitrate and further monitoring indicated an increasing nitrate concentration. The city requested help from the Governor's Office and state agencies tasked with preventing groundwater contamination. DEQ and OHA collaborated on a new Source Water Assessment document for the city in 2011. This served as a basis for understanding the risks of nitrate and other contaminants affecting the new wells. The city was awarded a Drinking Water Source Protection Fund grant in 2011 (actual funds to be awarded in Sept 2012) to develop strategies and implement protection within the groundwater source area. DEQ convened a local task force with other partners to implement a sampling and analysis plan in early 2012, which includes sampling over 20 domestic and irrigation wells for nitrates, pharmaceuticals and personal care products, and pesticides. In 2012, DEQ and the City of Irrigon initiated an interim outreach project for nitrate reduction.

#### Pesticide Collection Events.

The Clackamas River Water Providers (representing seven Public Water Systems (PWSs) that serve approximately 400,000 people) in partnership with the Clackamas County Soil and Water Conservation District (SWCD) and the Clackamas River Basin Council (CRBC) received a 319 NPS Grant to hold two Pesticide Round Up Events in 2011. More than 100 participants brought in over 56,000 pounds of pesticide waste. The collection event served a wide area and a majority of the pesticide wastes were collected from Clackamas and Marion county watersheds that provide drinking water. The highest participation rate was from the nursery industry but there was also significant participation from other sectors such as vegetable and berry growers, golf courses, and several smaller PWSs including a school district and manufactured home park. Legacy pesticides (some banned as early as the 1970's) were collected including DDT, Chlordane and Doseb. In addition, approximately 1,500 pounds of clean and residue-free, triple-rinsed plastic containers were also accepted for recycling at no charge to producers. See the factsheet at <http://www.deq.state.or.us/wq/pubs/factsheets/drinkingwater/PesticideRoundUp12WQ037.pdf> for more information on these events.

#### Turbidity Analysis.

The DEQ *Turbidity Analysis for Oregon Public Water Systems Water Quality in Coast Range Drinking Water Source Areas Report*, June 2010, <http://www.deq.state.or.us/wq/dwp/docs/TurbidityAnalysisOregonPWS201006.pdf> continues to be useful for public water systems addressing those issues in their source waters. DWP staff worked directly with 15 public water systems that have chronic problems with high turbidity levels. Several of these systems must shut down periodically due to extremely high turbid water. Research and assessment to date has included collection of raw water data, interviews with operators, GIS research on land uses, and field inspections. DEQ is currently using the data from the report to promote more active protection and awareness of potential violations to the turbidity standards in public water supply watersheds. The data from the report is also being used as input in DEQ's current process of revising the turbidity standard.

#### Nitrate Analysis.

DEQ has completed an analysis of groundwater nitrate and toxics data for 70 public water systems with high nitrate levels or risks of high nitrate levels. Included in the report is a soil nitrate sensitivity analysis, analysis of the effects of well construction and aquifer confinement, research on technical information on nitrate sources, and an evaluation of agricultural data and mapping of septic systems in sensitive areas adjacent to wells. There are currently 70 Oregon public water systems that are or at risk of having nitrate water quality standard violations. The nitrate data has been statistically analyzed and the sources of nitrates were evaluated to gain an understanding of the need for outreach and prevention planning. One of the goals of the statistical analysis is to develop plans to reduce the loading within the 2- and 5-year time-of-travel zones for each well. DEQ and the Oregon Health Authority (OHA) are already working with a few of these systems to implement nitrate-reduction plans. The full report is available at <http://www.deq.state.or.us/wq/dwp/docs/PWSnitrateReport.pdf>.

#### Watershed Basin Assessments and Action Plans

DEQ continues to develop drinking water-specific sections and data input for the Watershed Assessment Reports, including identifying drinking water sources, drinking water quality issues, potential contaminant sources and recommendations for action. These assessments draw on the expertise of DEQ's 17 water quality sub-programs include recommendations for actions that DEQ and others who are interested in these basins can take to improve water quality. To date, these in-depth assessments have been developed for the North Coast, South Coast, Deschutes, Rogue, Powder/Burnt, and Clackamas/Sandy basins. The Umatilla and Willamette basins assessments are in progress.

DEQ is working directly with multiple public water systems in a basin or subbasin to encourage protection strategies on a watershed scale basis. This includes coordinating with surface water providers in the Rogue River, Umpqua, Siletz, and Clackamas subbasins. For example, DEQ staff are working with the Winston-Dillard Water District, Oregon Department of Agriculture, and Douglas Soil and Water Conservation District to address high *E. coli* bacteria counts in untreated drinking water detected during Safe Drinking

Water Act testing. The partners are providing technical assistance to interested landowners, implementing on-the-ground restoration projects, and conducting effectiveness monitoring at project sites identified as high risk for bacteria contribution.

The City of Florence is served by a vulnerable water system that draws from a sole-source aquifer under federal definitions. OHA and DEQ drinking water staff have worked with the City and the Siuslaw Watershed Council to improve and protect drinking water and area water resources for several years. EPA awarded the City of Florence over \$500,000 to work with tribal, federal, state, and local partners in the Siuslaw watershed to help with the water quality efforts, as well as protect fish and wildlife habitat within their sole source aquifer study area. Key outcomes of the three-year [Siuslaw Estuary Partnership](#) project include an aquifer protection plan to be submitted to DEQ for certification, along with comprehensive plan and policy amendments within land use planning work to protect resources within the aquifer boundary. Florence is also collecting valuable groundwater and surface water monitoring data that will enhance efforts to better understand and improve water quality.

#### Input for DEQ's Internal Draft Harmful Algal Bloom (HAB) Strategy.

DWP staff continues to provide technical assistance to public water systems that may be impacted by HABs by providing data to identify and characterize potential sources (with data) and by assisting with the funding and development of pollutant reduction strategies. For example, four community water systems using coastal lakes (Clear, Eel, Siltcoos, and Woahink Lakes) as their water source partnered to apply for a Safe Drinking Water Protection grant to build local capacity related to HABs. The project was starting its second monitoring season in 2011 and has trained a number of interested parties and volunteers, including local PWS and watershed council staff. These stakeholders have identified two HAB events at their lakes and were key links in the identification and sampling chain. In addition, DWP reviewed provided input to US Forest Service regarding their role in drinking water protection and HABs.

#### Tualatin River Watershed GIS Demonstration Project.

DEQ participated in several 2011 and 2012 webinars and conference calls to share results and benefits from the GIS demonstration project in the Tualatin watershed. The GIS products from the Tualatin project continue to be used by partners working within the watershed. This was a national demonstration project integrating land use and water quality issues, called "Enabling Source Water Protection: Aligning State Land Use and Water Protection Programs". The work was completed in June 2010 under a grant from the US Environmental Protection Agency in partnership with The Trust for Public Land, Smart Growth Leadership Institute, Association of State Drinking Water Administrators, and River Network. The goal of Oregon's project was to create a replicable GIS-based tool to assist in prioritizing lands and sensitive areas for protection in the watershed above drinking water intake(s) by identifying healthy lands most important for conservation of water quality and identifying impaired lands that ought to be restored to help protect water quality. Much of the GIS research and the methods used for the project completion will be useful in other watersheds when assessments are undertaken.

#### Drinking Water Source Monitoring.

New sampling was performed as part of Phase III of the Drinking Water Source Monitoring project in early 2012. The locations of the source water sampling were selected based on detections of nitrates and other contaminants of concern in SDWIS monitoring. The samples were taken above the surface water intakes and at wells for analysis of a list of over 250 Oregon-specific herbicides, insecticides, pharmaceuticals, VOCs (including cleaners), fire retardants, PAHs, personal care products, and plasticizers. The purpose of the Source Monitoring project is to collect data from multiple contaminant sources to assist in determining priorities for technical assistance and prevention, and to collect screening level data on whether there are potential human health risks beyond those routinely monitored within the SDWA regulations.

A final report was posted on DEQ's website for Phase I and Phase II of the Drinking Water Source Monitoring project. Phases I and II included testing 17 surface water intakes, 16 wells, and 1 spring to determine characteristics and detections in the source waters identified as high-risk drinking water sources through the Source Water Assessments. Analytical results were interpreted and a short report was sent to each of the public water systems in 2010 and 2011. The summary report is available on DEQ's drinking water protection website.

#### Pesticide Sampling at Schools.

The Oregon Health Authority and DEQ teamed up to assist USDA on a nationwide school water testing project in 2012. USDA conducted free water testing for schools that are served by wells. The samples were analyzed by USDA for over 100 pesticides and pesticide degradation compounds. The purpose of the sampling project was to collect data on the prevalence of pesticides and pesticide metabolites in school well water. Participation in this project was voluntary. Schools in Oregon were solicited by letter from OHA and DEQ. DEQ lab staff collected the samples inside the schools and shipping the bottles to USDA's laboratory. Twenty Oregon schools from 13 counties participated. Of the twenty schools sampled in April 2012, 11 of those had pesticide detections. Two schools in Corvallis show 12 different pesticides detected. All detections were at very low levels. The results were sent to each school with a toxicological consult and interpretation of the data. DEQ's drinking water protection staff will be available to assist each school with development of drinking water protection plans to reduce pesticides in their drinking water. As we do in other similar drinking water nonpoint source work, we will ask our local agency partners to assist where appropriate.

#### Coordination with the Oregon Toxics Reduction Strategy.

DEQ continued working towards developing a comprehensive, integrated approach to address toxic pollutants in the environment that includes pesticides. An integrated approach is essential because these pollutants readily transfer from one environmental media to another, such as from air to water. DEQ's cross-media toxics reduction strategy is being developed through the assistance of 11 separate DEQ programs that already address some aspect of toxic management, including drinking water protection.

The objectives of this strategy include optimizing agency resources by focusing on the highest priority pollutants in a coordinated way, implementing actions that reduce toxic pollutants at the source, and establishing partnerships with other agencies and organizations to increase the effective use of public and private resources. The DWP input has been useful for assistance in identifying sources of toxics, selecting toxic reduction priorities, and prioritizing the statewide human health risks. A 2012 strategy report is available on DEQ's Toxics Reduction website.

#### Land Use Planning Assistance.

DEQ provides input to cities and counties that are reviewing their land use plans under Oregon's comprehensive land use planning process ("Periodic Review"). DEQ's input letters to communities include detailed information regarding their water sources, maps of the source areas, and specific recommendations and guidance for drinking water protection. In addition, DEQ's DWP program actively recommends "Smart Growth" as a tool for protecting drinking water - part of focused or regional efforts to achieve water resource management, conservation, and other local water quality goals.

When new developments are proposed that may impact public water systems, we recommend local communities communicate their concerns about drinking water protection to regional, county, or city planning agencies. Many planning officials do not know about the source areas that supply local drinking water, even though they are generally supportive and recognize the importance of incorporating water quality protection measures into new construction.

DEQ provides maps and GIS layers of the drinking water source areas to communities and counties to help identify the sensitive areas to protect. The actual tools used for drinking water protection can vary according to local conditions and needs, often bundled together into what is referred to as "Low Impact Development (LID)".

#### Model Ordinance Development.

DEQ and the Oregon Department of Land Conservation and Development (DLCD) updated model ordinance language that jurisdictions can use to protect [groundwater](#) and [surface water](#) sources of drinking water. The model ordinances will also be added to an updated version of Oregon's Water Quality Model Code and Guidebook, which was published in 2001.

The following tasks were completed in 2012:

1. Developed road condition metrics and reporting criteria to guide and verify improvements of forest agricultural and public roads in the Mid Coast TMDL watershed.
2. Assisted OHA develop cryptosporidium monitoring requirements and watershed protection conditions for a variance granting relief from treatment requirements to the City of Portland for the Bull Run Watershed.
3. Finalized Phase III of drinking water source monitoring to evaluate potential toxics in groundwater and surface water used by high-risk public water systems. Published report on the results of Phase I and II monitoring.
4. Assisted USDA in sampling drinking water for pesticides at 20 schools that are public water systems.
5. Encourage protection strategies on a watershed scale basis in the Rogue, Umpqua, Siletz, Tualatin, and Clackamas Sub-basins.
6. Assisted Clackamas River Water Providers, Clackamas SWCD, and Clackamas County as the initiate a technical assistance program for residential on-site systems in Clackamas Watershed, which includes inspections of septic systems and financial assistance for repairing or replacing failing systems.
7. Collaborated with a Douglas SWCD and ODA project to assess watershed conditions and conduct landowner outreach within priority South Umpqua Basin drinking water source areas.
8. Completed factsheet summarizing regulations and recommendations for pesticide spraying upstream of drinking water intakes available at <http://www.deq.state.or.us/wq/dwp/docs/pesticideUse.pdf>
9. Prepared data and comments for ODA staff on Agricultural Water Quality Management Plans for several basins in Oregon.
10. Completed two pesticide collection events in Clackamas. Initiated work on pesticide collection events in the Tualatin, Clackamas, Milton-Freewater and LaGrande areas.
11. DWP staff supplied maps, data, and write-ups on drinking water resources and quality for the Umatilla and Willamette basins Watershed Assessments. The Willamette basin assessment covers 10 subbasins.
12. Participated in several webinars and conference calls to share the results and benefits from the GIS demonstration project in the Tualatin watershed.
13. Participate in national nitrate/nutrients advisory committee.

#### 4.3.7 Groundwater Management Areas (GWMAs)

Groundwater Management Areas (GWMAs) are designated by DEQ when groundwater in an area has elevated contaminant concentrations resulting, at least in part, from Nonpoint sources. Once the GWMA is declared, a local Groundwater Management Committee comprised of affected and interested parties is formed. The Committee then works with and advises the state agencies that are required to develop an action plan that will reduce groundwater contamination in the area. Oregon has designated three GWMAs because of elevated nitrate concentrations in groundwater.

These include the [Lower Umatilla Basin GWMA](#), the [Northern Malheur County GWMA](#), and the [Southern Willamette Valley GWMA](#). Each one has developed a voluntary action plan to reduce nitrate concentrations in groundwater.

DEQ's objectives for groundwater quality protection in the future include the following activities:

- Continued sampling of Northern Malheur County GWMA well network consisting of 36 wells sampled quarterly. The next regional trend analysis is scheduled for early 2013.
- Continued sampling of Lower Umatilla Basin GWMA well network consisting of 31 wells sampled quarterly.
- Complete the document titled *Third Four-Year Evaluation of Action Plan Success in the Lower Umatilla Basin GWMA* that is currently in preparation.
- Once the *Third Four-Year Evaluation of Action Plan Success in the Lower Umatilla Basin GWMA* is finalized, the next Lower Umatilla Basin GWMA Action Plan will be prepared.

- Complete the Communications and Outreach Plan that the Lower Umatilla Basin GWMA Committee is currently working on.
- DEQ will work with the City of Irrigon to develop their voluntary Source Water Protection Plan.
- Coordinate the Southern Willamette Valley GWMA committee and implementation activities to reduce area-wide groundwater contamination.
- Continue monitoring 41 wells in the Southern Willamette Valley GWMA to determine groundwater trends. Provide EPA samples for stable isotopes analyses.
- Partner with EPA and Benton SWCD on two grants that will focus on the evaluation of the effectiveness of conservation enhancement practices in reducing nitrate pollution to the groundwater in the Southern Willamette Valley GWMA.
- Conduct focus groups from the neighbors of two small schools in the GWMA, which have Public Water Systems with nitrate at or near 10 mg/L nitrate-N, to determine how to best incorporate groundwater protection into the daily life of those GWMA residents.
- Use a social marketing approach to facilitate behavior change regarding groundwater protection.
- Update the Southern Willamette Valley Action Plan, to reflect activities that have been completed, and include additional voluntary strategies that were not part of the original Action Plan.
- Use the analyses to direct future work and GWMA Committee meeting topics.
- Start looking at funding sources for the Southern Willamette Valley GWMA, which may become a non-profit entity.
- Evaluate the potential nitrate impact to a 'deeper' aquifer in the Linn County area of the Southern Willamette Valley GWMA.
- Continue to implement the Lower Umatilla Basin and the North Malheur County GWMA Action Plans and evaluate the performance or success of the management plans in reducing groundwater contamination. Also, continue regional groundwater monitoring networks in the two GWMA's.
- Continue to work cooperatively with Deschutes County to implement groundwater protection programs in the La Pine area.
- Complete additional Drinking Water Source Water Assessments as new systems come online and provide technical assistance to communities developing drinking water protection plans.
- Continue funding and support of research, education, and implementation of BMPs for groundwater protection, as funding allows.

#### Northern Malheur County GWMA

The Northern Malheur County (NMC) GWMA was declared in 1989. An Action Plan was adopted in 1991 that identifies the source of contamination and measures to be taken to reduce the contamination. The nitrate trend in the Northern Malheur County GWMA is slightly declining.

The following NMC GWMA tasks were completed in 2012:

- Continued sampling of NMC GWMA well network consisting of 36 wells.
- Finalized a NMC GWMA Action Plan Amendment that (1) allowed the use of the Seasonal Kendall technique to assess nitrate trends, (2) removed the unattainable goal of an area-wide nitrate concentration of 7 mg/l by 2000, and (3) reduced the sampling frequency from six times per year to four times per year.

#### Lower Umatilla Basin Groundwater Management Area

The Lower Umatilla Basin (LUB) GWMA was declared in 1990. An Action Plan was adopted in 1997 that details the sources of nitrate and measures to be taken to reduce the nitrate contamination. The nitrate trend in the LUB GWMA continues to increase, although at a slower and slower rate.

The following LUB GWMA tasks were completed in 2012:

- The document titled *Estimation of Nitrogen Sources, Nitrogen Applied, and Nitrogen Leached to Groundwater in the Lower Umatilla Basin Groundwater Management Area*, <http://www.deq.state.or.us/er/reports/11er001.pdf> was finalized.



- The document titled *Third Trend Analysis of Food Processor Land Application Sites in the Lower Umatilla Basin Groundwater Management Area*, <http://www.deq.state.or.us/wq/groundwater/docs/lubgwma/trendrpt3/Report.pdf> was finalized.
- The document titled *Analysis of Groundwater Nitrate Concentrations and Trends in the LUB GMWA* was finalized.
- DEQ and Oregon Health Authority staff (coordinated by the Governor's Regional Solutions Team) conducted a Source Water Assessment for the City of Irrigon.

#### Southern Willamette Valley GWMA

The Southern Willamette Valley has been the focus of studies for 20 years because of concerns about elevated levels of nitrate in the shallow groundwater. The nitrate contamination originates from many everyday sources, such as fertilizer, septic systems, and animal waste. In 2004, DEQ designated the Southern Willamette Valley as a Groundwater Management Area (GWMA) to help ensure that Willamette Valley groundwater could continue to provide a high quality resource for present and future use. Since then, local stakeholders have been engaged in planning to protect and improve the groundwater resource in the Southern Willamette Valley. To view the website for this project, go to <http://gwma.oregonstate.edu/>.

DEQ continues to monitor the 24 monitoring wells DEQ installed in the Southern Willamette Valley, as well as the 17 domestic wells that make up the long term monitoring program. The 2009 "Synoptic Event" (included one-time sampling of a little over 100 additional wells) brought new understanding to the depth of nitrate impacts in some areas of the SWV GWMA. We have added a couple of additional wells to the long term monitoring program, in order to better assess this concern. In addition, EPA has volunteered to run stable isotopic analyses on surface and groundwater samples collected by the DEQ Lab.

#### **Southern Willamette Valley GWMA**

**Students from a Lane County High School get hands on experience in collecting groundwater samples and learning about the connection between land use and potential impacts to groundwater. Students take split samples with the DEQ lab and run their own analyses, eventually comparing them to the DEQ Lab results.**



The following tasks were completed in 2012:

1. For the fourth year, the GWMA Booth was a major hit at the *Kids Day for Conservation* event in Corvallis, where over 500 kids created an edible aquifer, polluted it with their land use of choice (fertilizer, manure, pet waste and/or pesticides – all edible replicates). In addition, they then added rain to the system, and followed that by drilling a well (straw) to learn how easy groundwater – and their drinking water - can be polluted.
2. A Strength, Weakness, Opportunity and Threat analyses was conducted for the SWV GWMA, and will be used to target future actions and meeting agendas.
3. Two grants were successfully sought by Benton SWCD and EPA Corvallis to allow these GWMA partners to collaborate on the evaluation of fertilizer management practices. The Willamette Partnership will also be a contributor to this work, and will develop a groundwater protection module for the Nutrient Tracking/Trading project.
4. DEQ continues to monitor the 24 monitoring wells DEQ installed in the Southern Willamette Valley, as well as ~ 17 domestic wells that make up the long term monitoring program.
5. The Southern Willamette Valley GWMA Committee continues to meet 3-4 times a year, to address and assess ongoing issues.
6. Students from a Lane County High school participated with DEQ Laboratory in the collection of 'split samples' to allow the students to build their own understanding of groundwater contamination. The students would take their samples to the school lab and run nitrate tests. The results of those tests are compared with the DEQ Lab results, to get a check on their analytical QA/QC.

#### **Southern Willamette Valley GWMA**

**Often, over-irrigation helps to push nutrients below the root zone. A recently funded EPA grant for the SWV GWMA will help to evaluate what fertilizer and irrigation management strategies are more protective of groundwater quality.**



#### 4.3.8 Coastal Zone NPS Program

Oregon's Coastal Nonpoint Pollution Control Program (CNPCP) is being developed in compliance with requirements adopted as part of the National Ocean and Atmospheric Administration (NOAA) Coastal Zone Act Reauthorization Amendments of 1990 (CZARA).

The CNPCP developed by DEQ and DLCD received approval by NOAA and EPA, with the exception of three components that were conditionally approved:

1. New development.
2. Operating onsite disposal systems.
3. Additional management measure for forestry.

NOAA and EPA in a December 21, 2012 letter to Oregon provided an assessment of Oregon's progress in meeting the last three management measures to receive full CZARA program approval. Under the settlement agreement between NWEA, EPA, and NOAA, the EPA and NOAA provided a written initial assessment of the adequacy of the programs and timeline in meeting the settlement agreement.

1. This includes whether implementation of the Implementation Ready (IR) TMDL approach being applied in the Mid-Coast Basin TMDL, including safe-harbor BMPs, is likely to result in actions that will achieve and maintain water quality standards.
2. Developing and updating IR TMDL for the sub-basin within the CZARA area could satisfy the outstanding condition on additional management measures for forestry identified in the May 12, 2010 EPA and NOAA letter to Oregon.
3. Progress on developing and implementing a time of sale inspection program for onsite systems in the CZARA area.
4. Completion of the TMDL Implementation Guidelines for the Coastal Nonpoint Program management area that incorporate the new development management measure requirements or practices consistent with the new development measure.

#### New Development Management Measure.

A draft of the TMDL Implementation Plan Development for Urban/Rural Residential Land Uses Within the Coastal Nonpoint Management Area was provided in July 2012 to NOAA and EPA for review and comment. In September 2012 Oregon DEQ included many of EPA and NOAA comments in the next final draft of the guidance document. Internal review continues with no date identified for public release.

#### Operating Onsite Disposal Systems.

~~In October 2012 DEQ further developed a Policy Option Package for Onsite Septic Systems Rules for Coastal Basins. The purpose of the rule changes were to require septic systems in defined coastal zone are inspected at the time of property transfer and identified deficiencies corrected to improve water quality. In addition, the rule changes would require newly permitted sand filters and pressure distribution systems are maintained by trained maintenance providers, and compliance recovery fees help pay for working with violations.~~

~~A ballot measure passed in November 2012 prohibits any "tax, fee or other assessment upon the transfer of any interest in real property. DEQ planned to use the reporting fee revenue to fund a staff position to implement the onsite inspection program.~~

#### Additional Management Measure For Forestry.

In 2012, this management measure required substantial effort in developing an Implementation Ready TMDL for the Mid-Coast basins. DEQ continues to work on an IR-TMDL for the MidCoast Basins to address bacteria and sediment. Work on temperature has been put on hold pending the results of the temperature standard litigation settlement agreement.

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#### 4.3.9 Monitoring and Data

DEQ conducts various types of monitoring as required by the state statute and federal CWA.

The existing monitoring programs that address NPS pollution include, but are not limited to:

- TMDL Development – Collect data to develop TMDLs for 303(d) listed streams. The data is used for a subbasin scale cumulative effects analysis for the development of the TMDLs.
- Groundwater – Identify areas of groundwater contamination and determine trends in Groundwater Management Areas.
- Large River Ambient – Collect data for long term trending at fixed sites across the state.
- Volunteer Monitoring – Improve data quality collected by third parties and increases the data accessibility for local and state assessments.
- Coastal Environmental / Bacteria Monitoring – Collects data to determine the need for beach advisories.
- Toxics Monitoring - Toxics Monitoring Project for surface waters in watersheds across Oregon. This project will give information about current and emerging contaminants that threaten aquatic life and human health.
- Pesticide Stewardship Partnership - Collaborative approach to monitoring pesticide in agricultural areas. Data identifying current use pesticides found in surface water is shared with growers to help them target management practices that reduce pesticides in water.

##### Statewide Watershed-based Toxics Monitoring Program.

The Toxics Monitoring Program collects data that supports the Agency's mission of protecting the environment and human health from the effects of toxics pollutants. This information may identify new problem areas or validate earlier findings. In 2012, as a continuation of a rotating basin approach to monitoring, the DEQ laboratory staff collected and analyzed surface water samples from 47 locations across the John Day, Deschutes, Sandy and Hood basins. In conjunction with ODFW, fish were collected at 3 locations. Collection of surface water samples occurred during three hydrologic periods in order to assess the impacts of differing flow regimes on contaminant concentrations as well as investigate seasonal use patterns. Collections occurred in the spring (May-June), summer (August-September) and fall (November). Analysis of the surface water samples for a broad suite of organic pollutants including current use pesticides, pharmaceutical and personal care products, industrial chemicals and chemical/combustion by-products and priority pollutant metals is currently underway at the laboratory.

Staff from the Toxics Monitoring Program supported implementation of the Agency's integrated watershed assessments in the Middle and Upper Willamette sub-basins as well as the Umatilla basin by summarizing and interpreting available toxic pollutant data for inclusion in the basin report. Toxics Monitoring Program staff updated internal and external stakeholders regarding findings and plans for completing the Agency's first state-wide survey of Oregon's basins in 2013. Though consultations with DEQ's TMDL Basin Coordinators, staff of the Toxics Monitoring Program initiated a planning to collect and analyze surface water, fish and sediment from sites in the coastal basins in 2013.

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Lower Mid-Columbia River Ecological Assessment

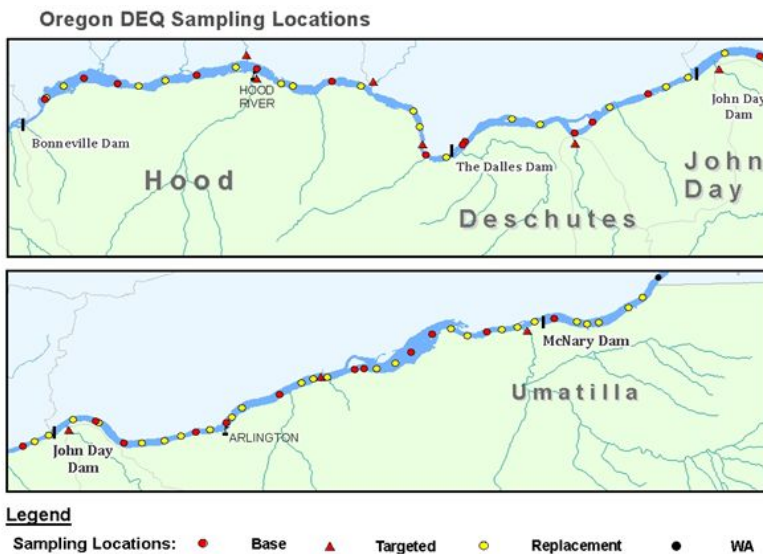
DEQ recently completed its “snapshot” ecological assessment of the Lower Mid-Columbia River, which covers 150 miles between Bonneville Dam on the west and McNary Dam on the east. This study — *the first of its kind on this section of the Columbia* -- showed that while the river’s fish and bank habitat is degraded, its water quality is generally good, with low levels of metals and organic compounds known as polyaromatic hydrocarbons. Unfortunately, bass and large scale sucker fish fillets sampled from the river as part of this study show accumulation of potentially harmful levels of mercury, chlorinated pesticides and other toxic or cancer-causing chemicals, including dioxins, furans, and PCBs.

[Lower mid-Columbia River Ecological Assessment Final Report](#) PDF (10 MB)

[Lower mid-Columbia River Ecological Assessment Final Report Without Appendix](#) PDF (2MB)

[Lower mid-Columbia River Ecological Assessment Final Report Appendix Only](#) PDF (8 MB)

This assessment fills information gaps and compliments studies conducted by states, tribes, federal agencies and non-governmental organizations to gauge conditions, identify problems and find solutions to pollution issues affecting the Columbia River. The EPA listed the Columbia Basin as one of seven Great Water Bodies deserving of special attention and protection from environmental harm.

Volunteer Monitoring Coordination.

DEQ conducted outreach and education activities and provide technical assistance to support volunteer monitoring in watersheds throughout Oregon. Staff reviewed and assisted in the development of seven sampling plans for seven organizations and worked with additional organizations to refine monitoring strategies or goals outside of the sampling plan process.

## Sampling Plans Reviewed:

1. Johnson Cr Watershed Council
2. Lower Nehalem Watershed Council
3. Powder River Watershed Council
4. Rogue Riverkeeper
5. Santiam-Calapooya Watershed Councils

6. Tryon Creek Watershed Council
7. Wallowa SWCD.

Staff provided high quality water quality testing equipment or supplies to 25 different organizations. There are approximately 50 organizations currently with equipment around the state. Provided technical assistance on equipment and protocols to approximately 25 organizations over the phone and conducted nine trainings in water quality monitoring techniques.

Staff also worked to review data generated by volunteer organizations for inclusion in the DEQ's online database. The datasets included over 10 years of data from 203 different locations. The primary purpose for collection of this data was for local volunteer organizations to characterize NPS pollution impacts. The data were made available to inform the Willamette Watershed Assessment and development of the Mid Coast TMDL.

#### Groundwater Management Areas.

DEQ staff performed routine sampling of three Groundwater Management Areas (GWMA) in the state. The Lower Umatilla Basin, Northern Malheur County, and Southern Willamette Valley GWMA are sampled four times per year.

## 4.4 Land Uses

### 4.4.1 Agricultural Lands

#### Oregon Department of Agriculture

DEQ's Nonpoint Source program works with ODA's Natural Resource Division to prevent pollution and improve water quality on agricultural lands. DEQ and ODA's program staff and management work collaboratively on various water quality related projects to address agricultural nonpoint sources.

#### Coordination highlights

- DEQ and ODA negotiated and signed a Memorandum of Agreement in May 2012. The MOA is intended to guide the agencies to fulfill respective legal responsibilities and obligations in an efficient and effective manner.
- DEQ's basin coordinators and ODA staff have ongoing working relationships with the review and implementation of Agricultural Water Quality Management Area Plans, as well as local water quality issues related to drinking water as resources allows.
- ODA is a designated management agency for TMDL implementation. ODA has been a partner for TMDL development, including the implementation ready TMDL in the Mid Coast.
- ODA went through a strategic planning process in 2012 which resulted in Resolution 331 by the Board of Agriculture in March 2013. The resolution supports ODA to establish a strategic program implementation process that identifies key geographic areas (strategic implementation areas) and targets resources to achieve compliance with local water quality regulations. The Board of Agriculture resolution noted that the effort should be founded on the basic conservation principles of erosion control, nutrient management, stream bank stabilization, and moderation of solar heating of streams, promoted by aligning resources with local, state and federal natural resource partners.
- Within strategic implementation areas, ODA will work with local, state, and federal partners to outreach to agricultural landowners. Following the outreach period, ODA will identify locations likely not meeting water quality regulations and schedule site visits to seek compliance.

#### Agricultural Water Quality Management Program

The process developed in the Agricultural Water Quality Management Program (AgWQMP) is the main regulatory mechanism to prevent and control nonpoint source pollution and meet water quality standards

and TMDL load allocations for agricultural lands. The program also is involved with the development of GWMA action plans and leads implementation for agricultural nonpoint sources. In addition, SWCDs have contractual relationships with ODA to act as a local management agencies (LMAs) to meet water quality goals on agricultural lands.

ODA and the SWCDs also produced seventeen reports in 2011 associated with Agricultural Water Quality Management Area (AgWQMA) Plan biennial reviews. The reports include updates on compliance and monitoring efforts as well as a summary of progress toward plan objectives and targets on outreach and on the ground projects. DEQ's regional staff provides technical assistance and coordinates with ODA's water quality specialists to review the area plans and provide information for the reports as resources allow. The area plans as well as the reports can be found at the following link:  
[http://egov.oregon.gov/ODA/NRD/water\\_agplans.shtml](http://egov.oregon.gov/ODA/NRD/water_agplans.shtml).

#### ODA's Water Quality Program Compliance Summary

The Agricultural Water Quality Management Act (ORS 568.900 to 568.933) authorizes ODA to develop Agricultural Water Quality Management Area Plans (area plans) throughout the state. The statute also authorizes the development of Agricultural Water Quality Management Area Rules (area rules) to serve as a regulatory backstop to the voluntary efforts described in the area plans. ORS 561.191 says that ODA shall develop and implement any program or rules that directly regulate farming practices to protect water quality.

The following figures are based on calendar year 2012, and the data was provided by ODA.

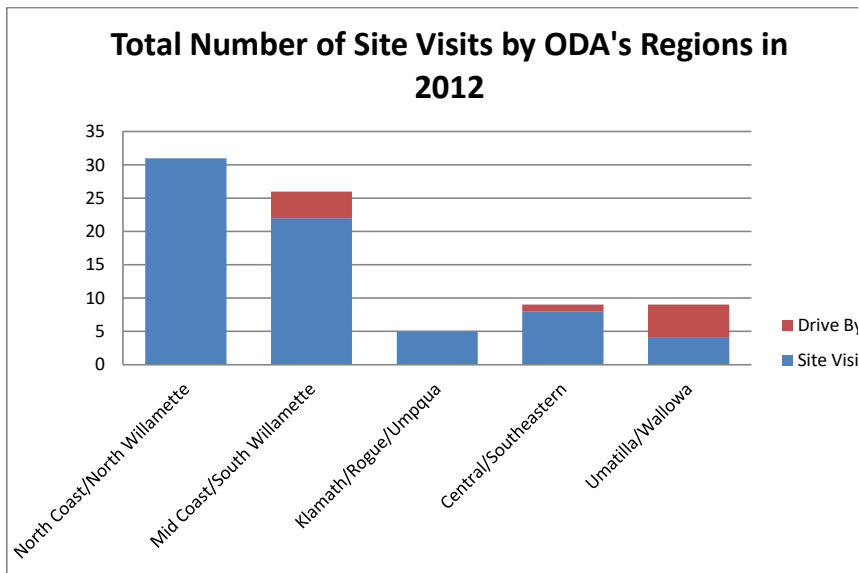


Figure 1: In 2012, sixty six new cases were filed by the public, ODA, and other agencies. ODA followed up by conducting site visits or driving by the sites. The majority of compliance cases were in the Willamette Valley.



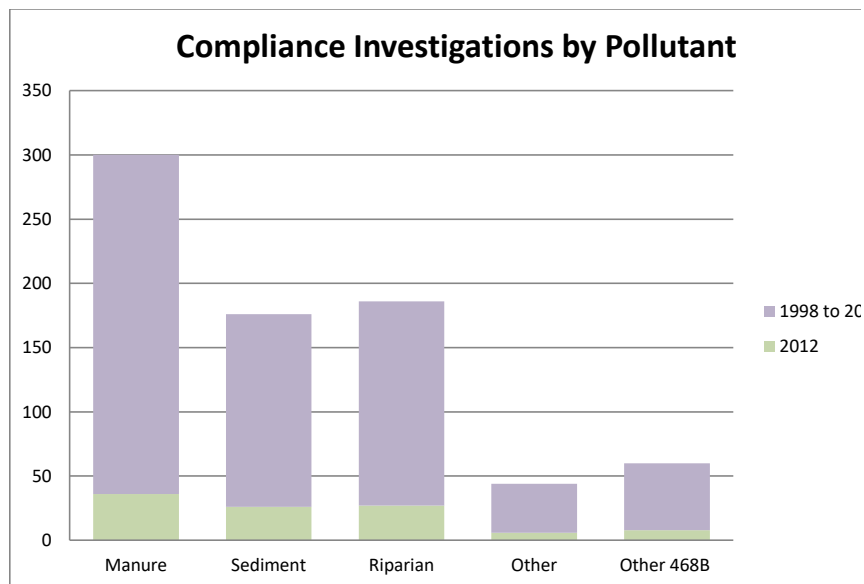


Figure 2: In 2012, more compliance investigations were initiated due to issues related to manure management than other water quality issues.

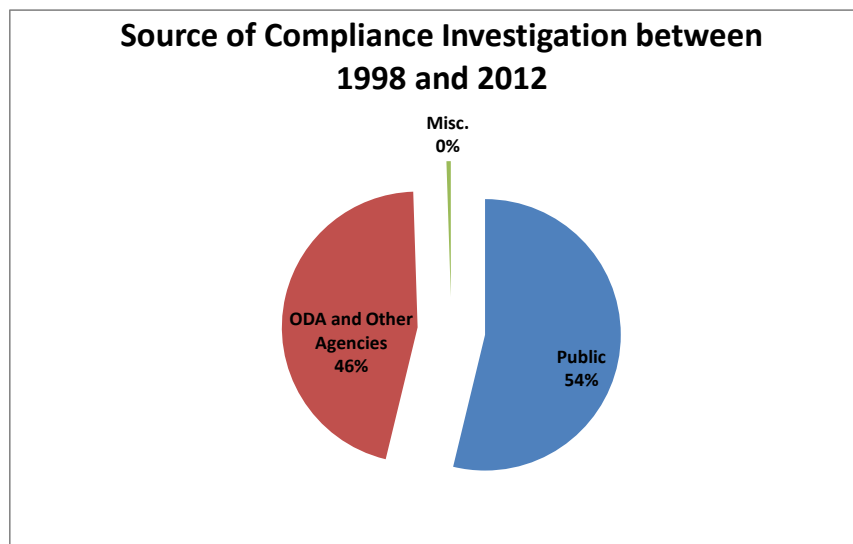


Figure 3: In the past fourteen years, there have been 582 compliance investigations. Over half of the complaints were submitted by the public. In 2012, DEQ referred 23 cases to ODA.

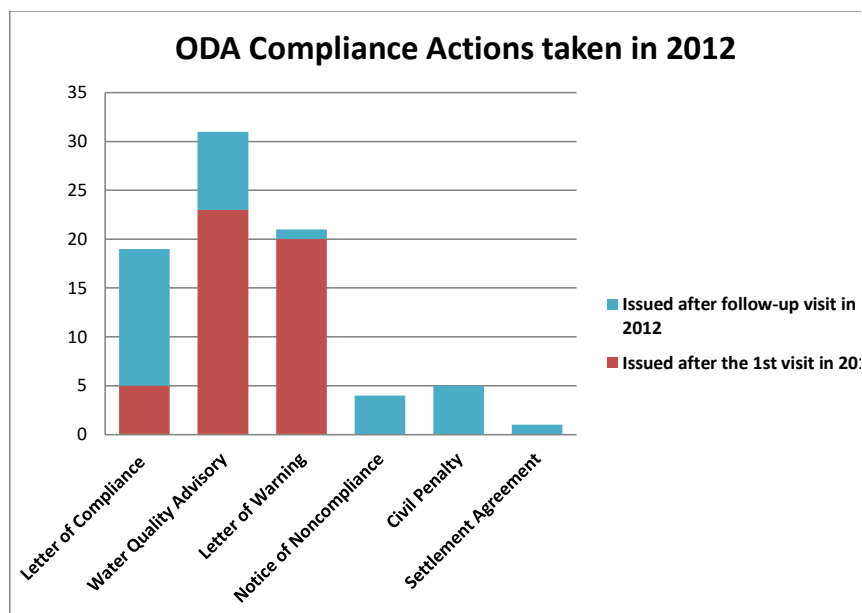


Figure 4: Total of 81 actions were taken in 2012. Four notices of noncompliance (an enforcement order), five civil penalties, and one settlement agreement were reached in 2012. In addition, 18 cases were either dropped due to lack of authority or referred to other agencies with jurisdiction, and 11 "fix it" letters (issued prior to advisory and warning letters) were issued.

#### Outreach and Education Summary

ODA provides funding to 45 Soil and Water Conservation Districts for implementation of water quality programs. One of the core components of the water quality program at ODA is its relationships with the SWCDs. ODA and the SWCDs negotiate scope of work agreements to clarify conservation projects to be completed. In Fiscal year 2011, the SWCDs used various venues to reach agricultural producers and rural land residents to promote conservation practices. Additional information on conservation practices is captured under funding partner section.

Table 1: SWCDs Outreach and Education Summary (2011-2012)

	# Events	Attendance or distribution
Presentations	213	7002
Demonstrations	24	598
Tours	73	1507
Displays	127	38457
Student Events	201	16171
Fact Sheets	62	20265
Newsletter articles	579	54641

Table 2: Other SWCD Activities

Number of Site Visits	2689
Water Quality Monitoring Sites	470

Management area specific information on the SWCD activities is available upon request. Contact Koto Kishida at Oregon DEQ (503-229-6381)

#### 4.4.2 State and Private Forest Lands

##### RipStream (Riparian Function and Stream Temperature).

ODF's RipStream project has been developed to provide a coordinated monitoring effort with which to evaluate effectiveness of Oregon Forest Practices Act (FPA) rules and strategies in protecting stream temperature, and promoting riparian structure that provides necessary functions for the protection of fish and wildlife habitat. DEQ is participating in the RipStream project by providing 319 funds and assisting in analyses of data and study results in cooperation with ODF staff.

In order to meet this objective, the following questions were addressed:

1. Are the FPA riparian rules and strategies effective in meeting DEQ water quality standards regarding anti-degradation of stream temperature and the water quality standard?
2. Are the FPA riparian rules and strategies effective in maintaining large wood recruitment to streams, downed wood in riparian areas, and shade?
3. What are the trends in riparian area regeneration?
4. What are the trends in overstory and understory riparian characteristics? How do they along with channel and valley characteristics correlate to stream temperature and shade?

ODF has completed their initial analysis to test whether current riparian protections on fish-bearing streams are adequate to meet water quality standards for temperature. In this study, streams in State Forests are meeting both numeric and Protecting Cold Water (PCW) criteria of the temperature standard. However, streams on private forests are not meeting the PCW criterion. Private streams are typically meeting the numeric criteria, although 3 of 18 experimental stream reaches showed an exceedance due to harvest. It should be noted that the starting temperatures in these streams are usually far below the numeric targets.

Streams managed by private land riparian rules showed a post-harvest average increase of 0.7 degrees C in the daily maximum temperature. State forest rules resulted in no change in the average daily maximum. Subsequent analysis has shown that reductions in shade are the primary factor driving these temperature changes, and shade decreases are primarily connected to lower basal areas. These results demonstrate the need for changes in riparian protection rules for private forestlands in Oregon.

##### In 2012, the following was accomplished:

The Oregon Board of Forestry issued a finding of degradation of resources (water quality) and initiated rulemaking. Rule alternatives are currently being designed and analyzed.

#### 4.4.3 Federal Forest Lands

##### DEQ/USFS MOU.

A final draft of the Memorandum of Understanding between U.S. Department of Agriculture-Forest Service's Pacific Northwest Region and State of Oregon Department of Environmental Quality to meet state and federal water quality rules and regulations was completed. Clean Water Act (CWA) Section 319(k) directs federal compliance with the "Oregon Nonpoint Source Pollution Plan" which identifies the need for Federal Agency MOUs. This Oregon plan states: "*MOUs will be developed to ensure that federal land management agencies comply with federal CWA and state water quality requirements and programs*".

DEQ and the U.S. Forest Service are updating an existing memorandum of understanding regarding joint water quality roles and responsibilities between the two agencies. The new memorandum seeks to strengthen working relations and establish closer coordination, particularly regarding Total Maximum Daily Load water quality planning development and implementation. This memorandum will also help minimize duplication of efforts. The current agreement expired on May 3, 2006, with the two agencies currently following terms of the old agreement.

The memorandum focuses on protection, restoration and maintenance of the physical, chemical and biological conditions of water that support beneficial uses (such as fishing, swimming, drinking water and

other uses defined in Oregon Administrative Rules, Division 41) and outlines how DEQ and the USFS will work together.

This final draft memorandum seeks to:

- Help DEQ and the USFS collaborate on priorities and strategies using a watershed approach to protect and restore water quality on national forest lands.
- Foster and enhance communication, coordination and working relations between DEQ and USFS.
- Identify USFS and State of Oregon policies, programs and practices that ensure attainment of federal and state water quality laws and water quality standards that collectively support the USFS's assignment as a designated management agency for meeting federal Clean Water Act requirements on federal lands.
- Recognize, clarify and support DEQ and USFS roles and responsibilities specific to water quality.

This memorandum affects federal forest and rangelands managed by USFS in Oregon as well as people interested in water quality and fisheries. USFS will identify and implement appropriate limits, best management practices, measures and approaches to meet federal and state water quality laws and regulations.

Next year in 2013, as was done for the recent updating of the BLM and DEQ MOU <http://www.deq.state.or.us/wq/nonpoint/docs/USFSDEQMOU.pdf>, DEQ will be providing a 15-day public review and comment period. DEQ is not holding a public hearing about this memorandum and will not be issuing a response to comments. DEQ will be taking written comments on this final draft memorandum and will review and consider all comments received during the public comment period. Following this review, DEQ will modify the memorandum if necessary, approve and sign.

#### DEQ/BLM MOU

DEQ and BLM water quality staff throughout 2012, reviewed the MOU and communicated to keep abreast of any major DEQ or BLM water quality issues, such as:

#### **BLM Planning Update For Western Oregon Forests**

In March 2012, the Bureau of Land Management (BLM) began the process of revising the Resource Management Plans (RMP) for 2.5 million acres of forested lands across six BLM Districts in western Oregon. BLM intends to revise six RMPs with an associated EIS for the Western Oregon Planning Area. BLM has begun the scoping process, to determine the scope of issues to be addressed by the environmental analysis, including alternatives, and the significant issues related to the planning process.

The Federal Land Policy and Management Act of 1976 (FLPMA) requires the development, maintenance, and revision of land use plans. Preparation of the RMPs and EIS will conform to federal and state management laws including, but not limited to the Endangered Species Act (ESA), the Clean Water Act, and the National Environmental Policy Act.

In 2012, the State of Oregon signed an MOU defining the process and scope of the state's involvement in developing an RMP that involves and receives better understating of how the state and federal clean water act and state rules and regulations are included in the RMP. DEQ, ODF, ODFW, and DSL directors signed the MOU. The key federal and state natural resources agencies are members of the Cooperating Agencies Advisory Group and technical workgroups such as riparian/aquatic resources.

BLM is on a schedule to have a final RMP and EIS completed by 2015.

## **4.5 Progress of 319 Grant Funded Projects**

### **4.5.1 Description of Types of 319 NPS Projects**

DEQ continually seeks projects from government agencies, tribal nations, and nonprofit organizations to address nonpoint sources (NPS) of pollution affecting coastal, river, lake, drinking, and ground water

resources of the state. The annual solicitation occurs annually during the months of October through December as part of the 319 Nonpoint Source Implementation Grants.

The 319 Nonpoint Source Implementation Grant funds target prioritized basins for specific NPS pollutants to effectively improve water quality.

The four general focus areas used to develop DEQ project priorities are:

- TMDL Implementation.
- 303(d) listings.
- Ground Water Management Areas (GWMAs).
- Drinking Water Source Areas.

For a more detailed description of DEQ's geographic and programmatic priorities for the twenty six (26) 319 funded projects in 2012 as identified in the 2012 319 RFP, see the Geographic and Programmatic Priorities for 319 Funding section below.

#### 4.5.2 Grant Performance Report Summary

The progress of NPS 319 Funded (Pass-Through) Projects is identified in **Table 18** in **Appendix 1**. The data used in the table is as of December 31, 2012. Forty (40) 319-funded projects are open; including the twenty six (26) 2012 funded projects.

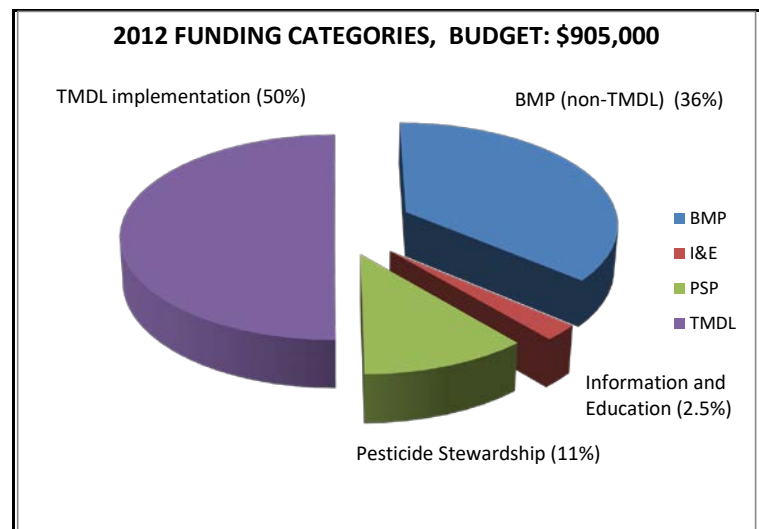
#### 4.5.3 Geographic and Programmatic Priorities for 319 Funding

**Table 13** in **Appendix 2** identifies DEQ's geographic and programmatic priorities for 319 funded projects in 2012 as outlined in the 2012 319 RFP (**Appendix 3**). These priorities were used to prioritize the 2012 319 Funded Projects. The identification of priority basins (as listed below) does not exclude the submission of proposals for work outside these basins. To determine how the "project need" was met by region and basin/subbasin; please refer to **Tables 10 and 11** for a list of the 2012 319 Grant Funded Projects in Response to the RFP.

#### 4.5.4 2012 319 Grant Funding Categories

The following **Figure 2** identifies the 2012 – 319 funding categories and funded amounts. The **\$1,111,832** total funds for 2012 was divided in four areas of emphasis, as follows: BMP Implementation (20%), TMDL Implementation, (53%) Pesticide Stewardship Program, (3%) and Information and Education (24%). Note that "BMP Implementation" did not include implementation of BMPs identified in a TMDL Implementation Plan and "TMDL Implementation" primarily focused on effectiveness monitoring.

Figure 2. 2012 Funding Categories



#### 4.5.5 2012 -- 319 Grant Funded Projects

The following **Tables 7** identifies the projects funded in response to the 2012 RFP:

**Table 6. 319 Projects Funded in Response to the 2012 RFP by Region and Basin/Subbasin**

REGION	PROJECT NAME	BMPS	PARAMETERS OF CONCERN	WATERSHED	319 BUDGET
EASTERN	Salmon-Safe Certification of Sweet Cherries in Umatilla County and Wasco County	Watershed Education	Horticulture pollutants	Umatilla / Wasco	\$55,000
EASTERN	Milton-Freewater Levee Setback and Habitat Enhancements	Hydromodification	Habitat	Walla Walla	\$96,000
EASTERN	Stream Simulation Trailer	Information And Education	All NPS	Grande Ronde	\$2,500
EASTERN	Filter Strip Water Quality Improvement	Implementation	Nutrients	Owyhee	\$25,300
EASTERN	Owyhee River Improvement Project - Phase 3	Planning	Nutrients	Owyhee	\$38,000
EASTERN	Channel Restoration Bioassessment in Eastern Oregon	Bio-Assessment	Temperature And Fish Habitat	Eastern Oregon	\$44,200
BUDGET					<b>\$261,000</b>
NORTHWEST	Upper Nehalem Riparian Restoration	TMDL Implementation	Temperature	Upper Nehalem	\$52,509
NORTHWEST	Tualatin Pesticide Collection Event	Pesticide Stewardship	Organics	Tualatin	\$28,897
NORTHWEST	Backyard Planting Program Yr 10	TMDL Implementation	Temperature/Bacteria /Sediment	Tillamook	\$53,115
NORTHWEST	South Fork Nehalem Dairy Farm Riparian Enhancement	Riparian Restoration	Invasive Species	Lower Nehalem	\$17,434
NORTHWEST	Tillamook SWCD 2012 Stream Enhancement and Restoration	TMDL Implementation	Temperature/Bacteria/ Sediment	Tillamook	\$35,925
NORTHWEST	Nestucca Riparian Restoration	TMDL Implementation	Invasive Species	Nestucca-Neskowin	\$53,115
NORTHWEST	Connecting People to Water Quality - Little Actions Make a Big Difference	Watershed Education	Temperature /Bacteria/Sediment	Clackamas	\$20,000
BUDGET					<b>\$260,995</b>

Table 7. 319 Projects Funded in Response to the 2012 RFP by Region and Basin/Subbasin (Cont.)

REGION	PROJECT NAME	BMPS	PARAMETERS OF CONCERN	WATERSHED	319 BUDGET
WESTERN	Morgan Creek Assessment and Restoration Project	TMDL Implementation	Temperature/Habitat	Morgan Creek	\$45,000
WESTERN	SWVGWMA Partners and Stakeholders Action Project	GWMA plan implementation	Nutrients	S. Willamette Valley Ground-water management area	\$43,471
WESTERN	Mid-Coast BMP Implementation Project	Developing And Implementation	Nutrients	Mid-Coast	\$45,420
WESTERN	Stream Smart: Bear Creek Clean Water Project Marketing Campaign	TMDL Implementation	All NPS	Bear Creek	\$18,900
WESTERN	Little Butte Creek Water Quality – Frey Phase	TMDL Implementation	Bacteria/Nutrients /Temperature	Butte Creek	\$20,000
WESTERN	Little Applegate Sig POD Measuring Device Project	In Stream Monitoring	Temperature/Habitat	Applegate	\$7,000
WESTERN	Nitrogen Sources in a Tidally-Restricted Estuary	Planning	Nutrients/Algal Growth	Curry	\$13,419
WESTERN	Garrison Lake Septic Revitalization Project	TMDL Implementation	Bacteria/Nutrients	Garrison Lake	\$7,186
WESTERN	S. Fork Coquille River Action Plan	planning	Temperature/Nutrients	Coquille	\$14,850
WESTERN	Santiam Calapooia WQ Monitoring Project	TMDL Implementation	Temperature/Bacteria Sediment	Santiam-Calapooia	\$45,754
BUDGET					<b>\$261,000</b>
STATEWIDE	ODF RipStream: Downstream temperature response to harvest	TMDL Implementation	Temperature	North-Mid range	\$30,000
STATEWIDE	Willamette Model Watershed Riparian Revegetation	TMDL Implementation	Temperature	Willamette	\$20,000
STATEWIDE	PSP (Pesticide Stewardship Partnership)	Pesticide Stewardship	Organics	Willamette	\$72,005
BUDGET					<b>\$122,005</b>
TOTAL BUDGET					<b>\$905,000</b>



#### 4.5.6 Estimates of NPS Load Reductions

Section 319 (h) (11) requires states to “report annually on what their nonpoint source programs are accomplishing, including available information on load reductions and actual water quality improvements”. The load reduction estimates need to be completed for projects funded by 319 funds annually.

EPA has requested that DEQ complete NPS pollutant load reductions using EPA’s Section 319 Grants Reporting and Tracking System (GRTS). DEQ used the load reduction model, “Spreadsheet Tool for Estimating Pollutant Load” (STEPL), within GRTS to estimate nitrogen (pounds per year), and phosphorus (pounds per year), Sedimentation-Siltation (tons per year) for three (3) 319 funded projects.

The following **Table 8** identifies the total **2012** load reduction estimates by pollutant for three (3) 319 funded projects are as follows: **6,095 Pounds/Year Nitrogen Reduction, 2,136 Pounds/Year Phosphorous Reduction, and 1,295 Tons/Year Sedimentation-Siltation Reduction**. Load reduction estimates were included in the EPA database GRTS (Grants Reporting and Tracking System).

**Note:** The estimates reported in this table were part of the annual report to EPA for Load Reduction Estimates for the year 2012.

**Table 8. Estimates of NPS Load Reductions of Selected 2012 -- 319 Funded Projects.**

2012 NPS PROJECTS – ESTIMATED NPS LOAD REDUCTION (USING STEPL)				
PROJECT NAME	BASIN	NITROGEN REDUCTION POUNDS/YEAR	PHOSPHOROUS REDUCTION POUNDS/YEAR	SEDIMENTATION-SILTATION REDUCTION TONS/YEAR
<a href="#">Milton-Freewater Levee Setback and Habitat Enhancements</a>	WALLA WALLA	137	47	35
<a href="#">Upper Nehalem Riparian Restoration</a>	TILLAMOOK	2166	713	198
<a href="#">Nestucca Riparian Restoration</a>	TILLAMOOK	3791	1377	1064
<b>ESTIMATED LOAD REDUCTION</b>		<b>6,095</b>	<b>2,136</b>	<b>1,297</b>

The following accomplishments occurred in 2012:

- DEQ’s 319 Grants Coordinator received additional GRTS load reduction training from EPA.
- DEQ completed load reductions estimates for three initiated (3) 2012 projects.
- Total load reduction estimates by pollutant are as follows:
  - **6,095** Pounds/Year Nitrogen Reduction
  - **2,136** Pounds/Year Phosphorous Reduction
  - **1,297** Tons/Year Sedimentation-Siltation Reduction

#### 4.5.7 Watershed Based Plans

The Watershed Approach currently being developed by DEQ is based on many components of approaches recommended by EPA and is used in some other states. The Watershed Approach is a basin-scale resource assessment process with greater opportunities for direct, interactive feedback from local stakeholders and tribal nations. Depending on which basin is the focus of the Watershed Approach, an applicable TMDL may have already been developed, may be under development, or may be scheduled for development.

Unlike TMDLs, the basin assessments conducted using the Watershed Approach are not limited to addressing CWA 303(d) listings using available water quality data. Basin assessments are intended to provide a snapshot of the environmental status and trends of the basin as a whole. They are intended not only to address surface water status for 303(d) listings and to identify other surface water concerns, but also groundwater issues and upland conditions in the basin. The Watershed Approach will not replace the development and implementation of TMDLs. But, it is envisioned that the Watershed Approach process will help local partners when they develop and implement strategies to address impairments prior to completion of the formal TMDL.

The Watershed Approach does not have a regulatory basis or purpose; a basin assessment is a guidance, assessment and action planning document. The basin assessments will not identify wasteload allocations for point sources or load allocations for nonpoint sources. They will, however, potentially inform load and wasteload allocations in Basin TMDLs where the level of data available to the assessment process is appropriate and may also help inform other regulatory processes.

The products of the Watershed Approach process consist of two primary elements: a basin status report and a basin action plan. Stakeholder involvement is also a critical component of the Watershed Approach.

DEQ completed its first three basin status/action plans (links below) as part of this project's pilot year. It will post three more assessments later in 2012. DEQ plans to cover the state's major basins in the next few years then re-visit each to mark progress and reassess how to deal with existing water quality problems.

[North Coast Water Quality Status/Action Plan - Summary](#)  
[North Coast Water Quality Status/Action Plan - Full Report](#)

[Deschutes Water Quality Status/Action Plan - Summary](#)  
[Deschutes Water Quality Status/Action Plan - Full Report](#)

[Rogue Basin Water Quality Status/Action Plan - Summary](#)  
[Rogue Basin Water Quality Status/Action Plan - Full Report](#)

DEQ has been working on developing additional basin status/action plans. The following Water Quality Status/Action Plans are nearly completed::

- Clackamas and Sandy River Basin
- South Coast Basin
- Powder/Burnt

DEQ has begun working on Water Quality Status/Action Plans for the following:

- Umatilla Basin
- Tualatin SubBasin
- Upper Willamette Area

In addition to the annual planning process taken by DEQ regional and Headquarter managers, the watershed approach provides an opportunity to identify areas in need of basin scale TMDLs. In basins where Watershed Approach process occurs prior to or concurrent with TMDL development, the following considerations should be taken to determine if TMDLs are needed.

- Pollutant/ cause of impairment.

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- Extent of impairment.
- Potential sources.
- Land use.
- Available resources to support implementation efforts.

The result of the findings during Watershed Approach will be considered when managers develop schedules for TMDLs.

A key outcome of the Watershed Approach is developing a plan that consists of a Status Report and an Action Plan that summarizes the important water quality problems and the strategies needing to be implemented. This information could be used to adaptively manage water quality in a geographic area.

DEQ is implementing the watershed approach to help align the DEQ Water Quality program with priorities. The watershed approach is “A coordinating framework for managing water quality that allows DEQ and our partners to build collaborative efforts to address the highest priority problems within a given watershed (modified from EPA).”

The following are the key elements of the Watershed Approach Vision:

- The Watershed Approach will allow DEQ to focus and coordinate its programs to understand, address, and communicate current water quality conditions in watersheds throughout the state
- The Watershed Approach will describe to communities in every watershed around the state what DEQ is doing and the priorities for addressing water quality problems in terms of nonpoint sources, point sources, permitting, monitoring, TMDL development and implementation plans, and grant and loan programs.
- The Watershed Approach will provide opportunities where DEQ can engage the local community in a discussion about water quality problems and solutions.
- Implementing the Watershed Approach will be iterative, and there will be lessons learned from each assessment. This will result in better water quality assessments, improved reporting, and the creation of opportunities to integrate DEQ’s knowledge into more of the water quality programs, which will result in smarter solutions.
- The Water Quality Status and Action Plans will have a wealth of information about each basin that will identify the priority water quality concerns and the important actions that DEQ and our partners can take to “restore, maintain and enhance” water quality.

This approach will describe to communities in the different watersheds around the state what the Water Quality Program is doing in their watershed, what our priorities are for addressing water quality problems, for nonpoint sources, for point sources, for permitting, for sampling, for TMDL development and for plan implementation.

A watershed plan will include:

- Water quality standards and beneficial use designations.
- Status of water quality conditions for surface and ground water throughout the basin.
- Links to databases to get detailed water quality data.
- Beneficial use impacts by pollutants from known or potential sources.
- Water quality data gaps and the priorities for gathering the needed data.
- Whether conditions are getting worse or improving.
- Whether there are water quality standards violations.
- Whether plans are being developed to meet standards and protect beneficial uses.
- Priorities for watershed implementation plan.
- Sources identified in the implementation plan.
- Locations of permitted sources, where they discharge, and whether the permits are up to date and where you could get a copy of the permit.
- Identify nonpoint sources.
- Critical priorities and work that address nonpoint sources.

- Where DEQ is spending Section 319 grant funds to restore riparian areas.
- Municipal wastewater treatment needs any loans or grants to upgrade, receipt of loans, and project status.
- The drinking water source areas for the communities in the basin.
- Compliance or enforcement actions.

## Appendices

**APPENDIX 0****LIST OF 2012 NRCS, 319, OWEB, CWSRF, AND DWSRF FUNDED WATER QUALITY PROJECTS BY BASIN/SUBBASIN**

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FUNDING SOURCE	SUBBASIN_HUC	YEAR	PROJECT_NAME_ACTIVITY	SUBBASIN_ACTUAL	BUDGET
OWEB	11111111	2011	Lincoln County Knotweed Control Project	Alsea, Siletz-Yaquina	\$91,463
OWEB	11111111	2011	Jordan Valley Weed Restoration Phase II	Upper Quinn	\$61,110
OWEB	16040201	2011	Hawk Irrigation Enhancement Phase II	Middle Snake-Succor	\$43,528
OWEB	16040201	2011	Jordan Valley Weed Restoration Phase II	Middle Snake-Succor	\$17,730
OWEB	17050103	2011	Jordan Valley Weed Restoration Phase II	Middle Owyhee	\$810
OWEB	17050103	2011	Homestead Irrigation Efficiency	Jordan	\$299,344
OWEB	17050103	2011	Jordan Valley Weed Restoration Phase II	Jordan	\$93,960
OWEB	17050103	2011	Jordan Valley Weed Restoration Phase II	Crooked-Rattlesnake	\$51,480
OWEB	17050107	2011	Grand Irrigation Efficiency	Lower Owyhee	\$124,623
OWEB	17050107	2011	Borge Water Quality Improvement	Lower Owyhee	\$81,292
OWEB	17050108	2011	Stinkingwater Habitat Enhancement & Grazing Management	Upper Malheur	\$39,143
OWEB	17050108	2011	Little Muddy Creek Range & Habitat Restoration	Upper Malheur	\$172,696
OWEB	17050108	2011	100 Acre Sprinkler Conversion	Lower Malheur	\$47,719
OWEB	17050108	2011	Sandhollow Feedlot Rehabilitation	Lower Malheur	\$61,848
OWEB	17050109	2011	Foothill Return Flow Elimination and Drain Ditch Restoration	Lower Malheur	\$171,619
OWEB	17050109	2011	Willow Creek Rechannelization	Willow	\$27,960
OWEB	17050110	2011	Vale Water Quality Improvement Project Lateral 230	Willow	\$846,111
OWEB	17050110	2011	Livestock Water Source Cleanup	Willow	\$3,872
OWEB	17050110	2011	AW Conversion to Sprinkler Irrigation	Willow	\$35,146
OWEB	17050110	2011	JW Conversion to Pivot Irrigation	Willow	\$17,140
OWEB	17050110	2011	Lissman Livestock Waste Water Elimination	Willow	\$6,244
OWEB	17050110	2011	Lone Tree Underground Pipe Project	Willow	\$36,013

OWEB	17050110	2011	Kitchen Creek Grazing & Wildlife Development	Burnt	\$30,179
OWEB	17050110	2011	Woodtick Watershed Restoration WUI	Burnt	\$461,789
OWEB	17050116	2011	Helping the Pleasant Valley Sage Grouse	Burnt	\$134,599
OWEB	17050116	2011	Pritchard Creek Stream Restoration Project	Burnt	\$13,319
OWEB	17050116	2011	West Camp Creek Push-up Dam Removal	Burnt	\$92,529
OWEB	17050116	2011	Thomas Angus Keating Spring Development	Powder	\$10,748
OWEB	17050117	2011	Not Dry Gulch Offstream Watering Project	Powder	\$45,298
OWEB	17050117	2011	Tobin Headbox and Weir	Powder	\$16,117
OWEB	17050117	2011	Martin Water Quality Improvement	Powder	\$8,734
OWEB	17050117	2011	R. Sadlowsky Spring Development	Powder	\$11,839
OWEB	17050117	2011	Warm Springs Cross Fencing	Powder	\$7,368
OWEB	17050117	2011	McEwen Valley Fish Passage	Powder	\$154,785
OWEB	17050119	2011	I-84 Riparian Restoration	Powder	\$17,151
OWEB	17050119	2011	Duncan Ditch Water Quality Protection Project	Powder	\$73,815
OWEB	17050119	2011	Kay Young: Working Towards a Fish Friendly Future	Powder	\$402,461
OWEB	17050119	2011	Wallowa Canyonlands Weed Partnership	Imnaha	\$80,102
OWEB	17050119	2011	Zumwalt Prairie Preserve Riparian Restoration	Imnaha	\$1,276,098
OWEB	17050119	2011	Misty Mountain Wildlife Habitat Enhancement	Upper Grande Ronde	\$20,363
OWEB	17050119	2011	Anderson Windbreak II	Upper Grande Ronde	\$6,684
OWEB	17050119	2011	Little Indian Creek Riparian Exclosure Fence OWEB #208-5048	Upper Grande Ronde	\$27,390
OWEB	17050119	2011	Bingham Riparian Fencing and Off-Channel Watering	Upper Grande Ronde	\$92,314
OWEB	17050119	2011	Parsons Gradient Terraces	Upper Grande Ronde	\$14,256
OWEB	17050119	2011	Lindley-Sheehy	Upper Grande Ronde	\$132,253
OWEB	17050119	2011	Dawson Irrigation Mainline	Wallowa	\$283,120
OWEB	17050119	2011	Wallowa Canyonlands Weed Partnership	Wallowa	\$22,000
OWEB	17050119	2011	Scott Fuels Treatment & Forest Restoration	Wallowa	\$12,100
OWEB	17050119	2011	Frasch Fuels Treatment & Forest Restoration	Wallowa	\$12,403
OWEB	17050119	2011	Upper Cow Hollow Water Quality	Lower Grande Ronde	\$115,231
OWEB	17050119	2011	Wallowa Canyonlands Weed Partnership	Lower Grande Ronde	\$52,000

OWEB	17050202	2011	Rock Creek Aspen Restoration	Lower Grande Ronde	\$59,598
OWEB	17050202	2011	Windbreak & Wildlife Habitat	Lower Grande Ronde	\$6,990
OWEB	17050202	2011	Well Springs Wildlife Water	Middle Columbia-Lake Wallua	\$3,174
OWEB	17050202	2011	Stewart Ditch Piping Efficiency	Walla Walla	\$8,729
OWEB	17050202	2011	Reducing Soil Erosion through Direct Seed - Ferguson	Walla Walla	\$21,714
OWEB	17050202	2011	Lampson Levee Setback and Habitat Restoration Project	Walla Walla	\$1,202,985
OWEB	17050202	2011	Weathers Ranch Spring Development	Umatilla	\$7,475
OWEB	17050202	2011	Charles Daly Upland Livestock Water	Umatilla	\$7,440
OWEB	17050202	2011	Old Lucky Livestock Water	Umatilla	\$14,970
OWEB	17050202	2011	26-08-023 McBee Wetland Enhancement	Umatilla	\$7,417
OWEB	17050203	2011	Stanfield Irrigation District C-Line Project	Umatilla	\$77,304
OWEB	17050203	2011	Reducing Soil Erosion through Direct Seed - Wilson	Umatilla	\$11,980
OWEB	17050203	2011	Hasenbank Ranch Watershed Improvement - 211-6006	Umatilla	\$54,984
OWEB	17050203	2011	Bear Creek Rangeland Management Enhancement	Umatilla	\$8,300
OWEB	17050203	2011	Elder Ditch Pipeline Conversion - 208-5058	Umatilla	\$70,570
OWEB	17050203	2011	Broken Spur Ranch Watershed Enhancements	Umatilla	\$43,365
OWEB	17050203	2011	McKinney Creek Riparian Enhancement	Willow	\$6,857
OWEB	17050203	2011	Sandahl Irrigation Improvement Project	Middle Columbia-Hood	\$12,641
OWEB	17050203	2011	Mosier Creek Riparian Restoration - Matthisen	Middle Columbia-Hood	\$7,562
OWEB	17050203	2011	Enriquez Irrigation Improvement Project	Middle Columbia-Hood	\$12,027
OWEB	17050203	2011	Union Substation Riparian Enhancement Project	Middle Columbia-Hood	\$3,036
OWEB	17050203	2011	Lower Mill Creek Riparian Restoration	Middle Columbia-Hood	\$2,846
OWEB	17050203	2011	Kollas Road Irrigation Improvement Project	Middle Columbia-Hood	\$15,327
OWEB	17050203	2011	Tieman Creek Cattle Crossing project	Middle Columbia-Hood	\$6,918
OWEB	17050203	2011	Johnson Irrigation Efficiency Upgrade	Middle Columbia-Hood	\$28,964
OWEB	17050203	2011	Mitchell Point Ivy Abatement Project	Middle Columbia-Hood	\$7,901
OWEB	17050203	2011	Carter Orchard Drip Irrigation	Middle Columbia-Hood	\$39,602
OWEB	17050203	2011	McGee Creek In-channel and Floodplain Restoration	Middle Columbia-Hood	\$261,850
OWEB	17050203	2011	Galvez West Irrigation Improvement Project	Middle Columbia-Hood	\$20,781



OWEB	17050203	2011	Paasch Drive Manure Storage Facility	Middle Columbia-Hood	\$17,209
OWEB	17050203	2011	Omeg Orchards Oregon Swallowtail Plantings	Middle Columbia-Hood	\$20,155
OWEB	17050203	2011	Little Beech Creek Watershed Restoration	Upper John Day	\$37,751
OWEB	17050203	2011	Kennedy-Murray phase I/Clausen Pump Station	Upper John Day	\$275,509
OWEB	17050203	2011	Lovlett Creek Crossing	North Fork John Day	\$13,140
OWEB	17050203	2011	Lower Rudio Creek Restoration	North Fork John Day	\$402,870
OWEB	17060102	2011	Rudio Creek Fish Passage Improvement	North Fork John Day	\$4,313
OWEB	17060102	2011	Knox Place Water System	North Fork John Day	\$81,984
OWEB	17060102	2011	West Fork Meadow Brook Riparian Improvements	North Fork John Day	\$82,397
OWEB	17060102	2011	Milk Ranch Grazing Management	North Fork John Day	\$4,215
OWEB	17060104	2011	Phelps Spring Development	North Fork John Day	\$6,990
OWEB	17060104	2011	Desolation Creek Culvert	North Fork John Day	\$271,836
OWEB	17060104	2011	Vote Spring Development	North Fork John Day	\$7,350
OWEB	17060104	2011	Cole-Engle Fish Passage and Irrigation Improvement	North Fork John Day	\$142,234
OWEB	17060104	2011	McCullough Spring Development Phase I	North Fork John Day	\$8,658
OWEB	17060104	2011	Oxbow Tailings Restoration - Phase 1	Middle Fork John Day	\$289,000
OWEB	17060104	2011	Camp Creek Log Weir Removal Phase I	Middle Fork John Day	\$57,500
OWEB	17060104	2011	Camp Creek Log Weir Removal Phase II	Middle Fork John Day	\$104,500
OWEB	17060104	2011	Upper Middle Fork Allotment Improvements	Middle Fork John Day	\$146,672
OWEB	17060104	2011	Roger Smith Pasture Restoration	Lower John Day	\$7,968
OWEB	17060104	2011	Rock Creek Water Crossing	Lower John Day	\$9,554
OWEB	17060104	2011	Stark Range Management	Lower John Day	\$3,682
OWEB	17060105	2011	Esau Canyon Sediment Control	Lower John Day	\$31,029
OWEB	17060105	2011	Marvin Thompson Upland Wildlife Water Project	Lower John Day	\$5,517
OWEB	17060105	2011	Stone Cabin Spring Development	Lower John Day	\$8,203
OWEB	17060105	2011	Donnelly Basin Upland Improvement	Lower John Day	\$7,215
OWEB	17060105	2011	Ron Quant LLC Juniper Removal	Lower John Day	\$5,239
OWEB	17060105	2011	Padget Upland Erosion Control	Lower John Day	\$4,185
OWEB	17060105	2011	Park Pasture Livestock Water Developments	Lower John Day	\$9,702
OWEB	17060105	2011	Lower Kayser Fish Passage Improvements	Lower John Day	\$83,611

OWEB	17060105	2011	Bob Martin Upland Erosion Control	Lower John Day	\$3,209
OWEB	17060105	2011	Upper Kayser Fish Ladder	Lower John Day	\$109,011
OWEB	17060105	2011	Ramsey/Rock Creek Riparian	Lower John Day	\$157,132
OWEB	17060105	2011	Lonerock Creek Juniper Removal Phase II	Lower John Day	\$6,804
OWEB	17060106	2011	Anderson's Lonerock Creek Juniper Removal, Phase II	Lower John Day	\$5,365
OWEB	17060106	2011	Thompson Creek Upland Improvement	Lower John Day	\$47,141
OWEB	17060106	2011	Gable Creek Irrigation Efficiency/Fish Passage	Lower John Day	\$97,452
OWEB	17060106	2011	Three Sisters Irrigation District McKenzie Canyon Phase 1 Piping Project	Upper Deschutes	\$2,463,232
OWEB	17060106	2011	MM Riparian Area Protection	Upper Deschutes	\$13,889
OWEB	17060106	2011	Metolius River Fish Habitat	Upper Deschutes	\$496,918
OWEB	17060106	2011	TSID Main Canal Water Conservation Project Phases 1&2	Upper Deschutes	\$1,970,706
OWEB	17060106	2011	South Fork Beaver Creek Uplands Enhancement Project	Beaver-South Fork	\$711,376
OWEB	17070101	2011	Tweedt Juniper Removal Project	Upper Crooked	\$2,482
OWEB	17070101	2011	Ant Creek Juniper Removal	Upper Crooked	\$167,473
OWEB	17070101	2011	Middle Fork Spring and Mule Deer Habitat Restoration Project	Upper Crooked	\$42,802
OWEB	17070101	2011	Lucky Creek Juniper Removal Project	Upper Crooked	\$14,900
OWEB	17070101	2011	Camp Creek Riparian and Spring Restoration Project	Upper Crooked	\$31,635
OWEB	17070101	2011	Brown Aspen Recovery Project	Upper Crooked	\$23,422
OWEB	17070102	2011	Prineville Reservoir Southern Watersheds Restoration Project	Upper Crooked	\$448,960
OWEB	17070102	2011	Gotcher Juniper Removal Project	Lower Crooked	\$2,705
OWEB	17070102	2011	Sale Spring Development Project	Lower Crooked	\$8,080
OWEB	17070102	2011	Downing Irrigation Delivery Improvement Project	Lower Crooked	\$15,684
OWEB	17070102	2011	Mill Creek Habitat and Floodplain Restoration Project	Lower Crooked	\$61,033
OWEB	17070102	2011	Alley Upland Erosion Control	Lower Deschutes	\$6,121
OWEB	17070102	2011	Smith Farms Drip Irrigation	Lower Deschutes	\$19,534
OWEB	17070102	2011	Olsen Sediment Control	Lower Deschutes	\$1,565
OWEB	17070102	2011	Vanek Drip Irrigation	Lower Deschutes	\$20,323
OWEB	17070102	2011	Fox Hollow Irrigation Efficiency	Lower Deschutes	\$32,695
OWEB	17070103	2011	Moore Brothers Upland Erosion Control	Lower Deschutes	\$7,038

OWEB	17070103	2011	Bakeoven/Cottonwood Sediment Basins	Lower Deschutes	\$82,845
OWEB	17070103	2011	Arnold Irrigation District Vegetation Management	Lower Deschutes	\$12,558
OWEB	17070103	2011	Maunder Wetland Enhancement	Trout	\$6,560
OWEB	17070103	2011	Sagebrush Springs Lechner WQ	Trout	\$8,188
OWEB	17070103	2011	Offsite Livestock Watering McNamee	Trout	\$9,231
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Dabney	Lower Columbia-Sandy	\$130,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 city of sandy	Lower Columbia-Sandy	\$139,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Sleepy Hollow	Lower Columbia-Sandy	\$32,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Wilsons	Lower Columbia-Sandy	\$39,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Confluence	Lower Columbia-Sandy	\$39,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Lower Salmon BLM	Lower Columbia-Sandy	\$68,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Arrah Wanna	Lower Columbia-Sandy	\$29,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Golf Course	Lower Columbia-Sandy	\$15,500
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Lower Gorge	Lower Columbia-Sandy	\$62,000
OWEB	17070103	2011	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Welches to USFS	Lower Columbia-Sandy	\$13,000
OWEB	17070103	2011	Badger Creek Reforestation	Lower Columbia-Sandy	\$1,892
OWEB	17070103	2011	Sandy River Wild and Scenic Invasive Treatments	Lower Columbia-Sandy	\$142,586
OWEB	17070103	2011	Walker Crk fill and culvert removal	Lower Columbia-Sandy	\$1,426
OWEB	17070103	2011	Janshaw Culverts	Lower Columbia-Clatskanie	\$5,614
OWEB	17070103	2011	Vannatta Rocking	Lower Columbia-Clatskanie	\$3,982

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OWEB	17070103	2011	North Fork Klaskanine Restoration of Knotweed-Treated Areas	Lower Columbia	\$12,248
OWEB	17070103	2011	Salo Manure Storage	Lower Columbia	\$10,694
OWEB	17070103	2011	Lost Creek Culvert	Lower Columbia	\$599
OWEB	17070103	2011	Hammond Road Culverts	Lower Columbia	\$3,208
OWEB	17070104	2011	Reindeer Culverts	Lower Columbia	\$2,517
OWEB	17070104	2011	South Fork Simpson Bridges	Middle Fork Willamette	\$49,356
OWEB	17070104	2011	Engdahl Wetland and Stream Enhancement Project	Middle Fork Willamette	\$15,493
OWEB	17070104	2011	Nelson Creek Riparian Restoration Project	Middle Fork Willamette	\$160,311
OWEB	17070105	2011	Gossage Creek CMP (Fish Pipe)	Middle Fork Willamette	\$25,500
OWEB	17070105	2011	BK 766A/770	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 7046	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 7320 Pit	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 7100	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 530	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 7040A	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 6000/6100	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 6100	Middle Fork Willamette	\$0
OWEB	17070105	2011	LFC 136	Middle Fork Willamette	\$0
OWEB	17070105	2011	BK 700	Middle Fork Willamette	\$0
OWEB	17070105	2011	Deer Cr 4000/6000	Middle Fork Willamette	\$0
OWEB	17070105	2011	Middle Fork Willamette Bull Trout Restoration	Middle Fork Willamette	\$338,390
OWEB	17070105	2011	Buford Park False Brome Control	Coast Fork Willamette	\$36,529
OWEB	17070105	2011	McCoy Upland Water Quality Project	Coast Fork Willamette	\$13,034
OWEB	17070105	2011	Mosby Creek Spring Chinook Re-establishment	Coast Fork Willamette	\$196,210
OWEB	17070105	2011	Bear Creek Bypass & Fish Pipes	Coast Fork Willamette	\$42,700
OWEB	17070105	2011	Childers 2000	Upper Willamette	\$0
OWEB	17070105	2011	Murphy Wetland Restoration	Upper Willamette	\$13,079
OWEB	17070105	2011	Sutliff Oak Savanna Restoration Project	Upper Willamette	\$26,525
OWEB	17070105	2011	Applegate Farm Wetland Restoration	Upper Willamette	\$18,828

OWEB	17070105	2011	Sjoberg Manure Storage Facility	Upper Willamette	\$9,113
OWEB	17070105	2011	OWEB Grant #209-3007 - Delta Ponds Habitat Restoration	Upper Willamette	\$525,530
OWEB	17070105	2011	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Raindance	Upper Willamette	\$55,754
OWEB	17070105	2011	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Dunn	Upper Willamette	\$87,300
OWEB	17070105	2011	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Marys	Upper Willamette	\$88,070
OWEB	17070105	2011	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Wintercreek	Upper Willamette	\$49,200
OWEB	17070105	2011	Dump Tower	Upper Willamette	\$0
OWEB	17070105	2011	Fergie's Rise	Upper Willamette	\$0
OWEB	17070105	2011	Lutefisk	Upper Willamette	\$0
OWEB	17070105	2011	Multnomah Channel Habitat Connection	Upper Willamette	\$16,570
OWEB	17070105	2011	Winter Green Farm Pond Enhancement & Invasive Species Control	Upper Willamette	\$27,865
OWEB	17070105	2011	South Meadow Floodplain Enhancement Phase III (OWEB Grant #208-3090)	Upper Willamette	\$431,346
OWEB	17070105	2011	Mohawk 2400 / 2446	Upper Willamette	\$0
OWEB	17070201	2011	West Potts Cr.	Upper Willamette	\$0
OWEB	17070201	2011	Mohawk 2400A	Upper Willamette	\$0
OWEB	17070201	2011	Calapooia 3700	Upper Willamette	\$0
OWEB	17070201	2011	Calapooia 3000 / 3020	Upper Willamette	\$0
OWEB	17070202	2011	Calapooia 3190	Upper Willamette	\$0
OWEB	17070202	2011	Calapooia 3033/3034/3035 Road Repair	Upper Willamette	\$75,000
OWEB	17070202	2011	Calapooia 3030 Road Repair	Upper Willamette	\$10,000
OWEB	17070202	2011	Wendling 15022	McKenzie	\$0
OWEB	17070202	2011	Camp Creek Tie	McKenzie	\$0
OWEB	17070202	2011	McGowan 120 / 400	McKenzie	\$0
OWEB	17070202	2011	BK 800 / 900	McKenzie	\$0
OWEB	17070202	2011	MHS Cartwright Creek Riparian Project	McKenzie	\$10,062

OWEB	17070202	2011	Wendling 15034	McKenzie	\$0
OWEB	17070202	2011	Quarry Tie	McKenzie	\$0
OWEB	17070202	2011	Gate Cr. 60	McKenzie	\$0
OWEB	17070202	2011	Mohawk 2000C	McKenzie	\$0
OWEB	17070202	2011	Gate Cr. 113 / 114	McKenzie	\$0
OWEB	17070202	2011	Camp Cr. 570	McKenzie	\$0
OWEB	17070202	2011	Gate Cr. Mainline	McKenzie	\$0
OWEB	17070202	2011	McGowan 140	McKenzie	\$0
OWEB	17070202	2011	Drury Cr. 400	McKenzie	\$0
OWEB	17070202	2011	Gate Cr. 113	McKenzie	\$0
OWEB	17070202	2011	BK 600	McKenzie	\$0
OWEB	17070202	2011	BK 764	McKenzie	\$0
OWEB	17070202	2011	Greenhouse 20	McKenzie	\$0
OWEB	17070202	2011	Trout Cr. M/L	McKenzie	\$0
OWEB	17070202	2011	BK 421 / Greenhouse Tie	McKenzie	\$0
OWEB	17070202	2011	Gales 600	McKenzie	\$0
OWEB	17070202	2011	LFC 500	McKenzie	\$0
OWEB	17070202	2011	LFC 800	McKenzie	\$0
OWEB	17070202	2011	BK 961	McKenzie	\$0
OWEB	17070203	2011	TC 11000/12100	McKenzie	\$0
OWEB	17070203	2011	LFC 500/Deer Creek 6000	McKenzie	\$0
OWEB	17070203	2011	Booth Kelly 400 Road Repair	McKenzie	\$70,000
OWEB	17070203	2011	Booth Kelly M/L Pipe Replacement	McKenzie	\$5,000
OWEB	17070203	2011	Camp Ck 700 Pipe Replacement	McKenzie	\$1,500
OWEB	17070203	2011	Giustina ML Log Fill Replacements	McKenzie	\$21,325
OWEB	17070203	2011	North Santiam Instream-SIP	North Santiam	\$123,360
OWEB	17070203	2011	Oregon 150- Jefferson Farm Upland Prairie Restoration	North Santiam	\$45,552
OWEB	17070204	2011	Gates Scale sediment trap and cross-drain	North Santiam	\$1,421
OWEB	17070204	2011	Moose Creek Steelhead Habitat Improvement	South Santiam	\$206,280
OWEB	17070204	2011	Bates Erosion Control and Water Quality Improvement	South Santiam	\$16,585

OWEB	17070204	2011	South Santiam McDowell Creek Instream (SIP)	South Santiam	\$113,632
OWEB	17070204	2011	GM 1300 WRMI	South Santiam	\$0
OWEB	17070204	2011	Luckiamute Watershed Council - Falls City Riparian Restoration	Middle Willamette	\$15,344
OWEB	17070204	2011	Van Kleek Riparian Restoration	Middle Willamette	\$10,290
OWEB	17070204	2011	LFC 7067/7500	Middle Willamette	\$0
OWEB	17070204	2011	LFC 170 TIE	Middle Willamette	\$0
OWEB	17070204	2011	Gilbertson Wildlife Habitat Restoration	Middle Willamette	\$5,919
OWEB	17070204	2011	Livestock Exclusion Project	Middle Willamette	\$13,553
OWEB	17070204	2011	Kittyhawk Oak Forest Stand Improvement	Middle Willamette	\$16,791
OWEB	17070204	2011	Sodom Dam Removal	Middle Willamette	\$1,394,143
OWEB	17070204	2011	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Mudslough	Middle Willamette	\$31,700
OWEB	17070204	2011	LFC 160	Middle Willamette	\$0
OWEB	17070204	2011	Gooseneck Creek Restoration	Yamhill	\$131,381
OWEB	17070204	2011	Dopp Creek Wetland and Upland Restoration	Yamhill	\$8,815
OWEB	17070204	2011	Payton Erosion Control	Yamhill	\$11,482
OWEB	17070204	2011	Crooked Creek Bridge	Yamhill	\$25,000
OWEB	17070204	2011	Skyline School Native Plant Garden SG#13-08-014	Tualatin	\$63,819
OWEB	17070204	2011	Mt. Richmond Wetland Enhancement Project	Tualatin	\$4,906
OWEB	17070204	2011	Gordon Creek Restoration	Tualatin	\$11,849
OWEB	17070204	2011	Radloff Property Restoration Project	Tualatin	\$16,519
OWEB	17070204	2011	Carter Creek Restoration Project	Tualatin	\$30,065
OWEB	17070204	2011	Elmwood Neighborhood Restoration Project	Tualatin	\$24,810
OWEB	17070204	2011	Witcher Creek Culverts	Tualatin	\$1,198
OWEB	17070204	2011	Upper Clear Creek Habitat Improvement Project	Clackamas	\$92,653
OWEB	17070204	2011	Spring Creek/ Mattoon Road Fish Habitat Restoration Project	Clackamas	\$345,532
OWEB	17070204	2011	Redland Road Fish Passage Improvement	Clackamas	\$84,882
OWEB	17070204	2011	Fall Creek log stringer bridge removal	Clackamas	\$778
OWEB	17070204	2011	Salmon Creek Fish Barrier Correction	Lower Willamette	\$297,685

OWEB	17070204	2011	Tryon Creek Off-Channel Habitat Enhancement	Lower Willamette	\$443,000
OWEB	17070204	2011	Nettle Creek Riparian Restoration Partnership	Lower Willamette	\$15,560
OWEB	17070204	2011	Fisher Park Creek Enhancement Project	Lower Willamette	\$7,131
OWEB	17070204	2011	Sauvie Island Pollinator Habitat Project	Lower Willamette	\$8,500
OWEB	17070204	2011	Balch Creek Watershed Restoration Demonstration	Lower Willamette	\$33,959
OWEB	17070204	2011	East Lents Restoration Project	Lower Willamette	\$2,518,603
OWEB	17070204	2011	Crystal Springs Restoration and 28th Ave culvert replacement at Reed College	Lower Willamette	\$687,191
OWEB	17070204	2011	NARA NW Native Plant Restoration	Lower Willamette	\$9,920
OWEB	17070301	2011	Pisgah Culvert	Lower Willamette	\$300
OWEB	17070301	2011	Trenholm Culverts	Lower Willamette	\$9,421
OWEB	17070301	2011	Joe Creek Restoration Project - Riparian Planting 2011	Necanicum	\$5,642
OWEB	17070301	2011	Culvert removal- Rippett Lane, Seaside, OR	Necanicum	\$1,030
OWEB	17070301	2011	Elk Flats Restoration 210-1023	Necanicum	\$91,322
OWEB	17070301	2011	Tweedle Creek LWD Placement	Nehalem	\$14,112
OWEB	17070301	2011	Sage Mud and Manure	Nehalem	\$13,392
OWEB	17070301	2011	South Lousignont Culvert and Fill Removal	Nehalem	\$26,700
OWEB	17070301	2011	Shortsands ML Bridge	Nehalem	\$72,487
OWEB	17070301	2011	Shortsands ML Culvert	Nehalem	\$58,825
OWEB	17070301	2011	Camp Olson Bridge	Nehalem	\$84,512
OWEB	17070301	2011	Camp Olson Culvert	Nehalem	\$24,277
OWEB	17070301	2011	Anderson Creek Grade Bridge	Nehalem	\$43,512
OWEB	17070303	2011	Ruby Planting project	Wilson-Trask-Nestucca	\$54,615
OWEB	17070303	2011	Farmer Creek LWD Placement	Wilson-Trask-Nestucca	\$37,477
OWEB	17070304	2011	Schon-Platz Fencing/Planting Project	Wilson-Trask-Nestucca	\$13,083
OWEB	17070304	2011	Miami Wetland Enhancement Project	Wilson-Trask-Nestucca	\$1,244,975
OWEB	17070304	2011	Beaverdam 6.5 mile Fish Pipe	Wilson-Trask-Nestucca	\$24,100
OWEB	17070304	2011	West Olalla Passage	Siletz-Yaquina	\$20,630
OWEB	17070304	2011	Ojalla Creek Instream Habitat Restoration	Siletz-Yaquina	\$33,900
OWEB	17070304	2011	Pixieland Phase I - Restoration	Siletz-Yaquina	\$313,249



OWEB	17070304	2011	630 Road/170 Road Connector - 2011	Siletz-Yaquina	\$28,200
OWEB	17070304	2011	NE0962, Jack Creek Salmon Enhancement	Siletz-Yaquina	\$41,000
OWEB	17070304	2011	1000 Road East Pipe	Siletz-Yaquina	\$23,102
OWEB	17070304	2011	1000 Road West Pipe	Siletz-Yaquina	\$16,415
OWEB	17070304	2011	1000 Road West Pipe	Siletz-Yaquina	\$9,600
OWEB	17070304	2011	Kelty Loop Pipe	Siletz-Yaquina	\$9,464
OWEB	17070304	2011	Schooner Creek Dam Removal	Siletz-Yaquina	\$5,857
OWEB	17070304	2011	Lost Name Fill Removals	Siletz-Yaquina	\$17,744
OWEB	17070305	2011	700 Road Decommissioning	Siletz-Yaquina	\$4,700
OWEB	17070305	2011	Meat Loaf North Reconstruction	Siletz-Yaquina	\$73,060
OWEB	17070305	2011	Upper Yachats River Restoration	Alsea	\$14,754
OWEB	17070305	2011	03-10-008 Mackall Riparian Planting	Alsea	\$18,752
OWEB	17070305	2011	Trout Creek Basin Improvements	Alsea	\$202,951
OWEB	17070305	2011	Lincoln County Restoration Planting	Alsea	\$26,365
OWEB	17070305	2011	Headrick Corner	Alsea	\$0
OWEB	17070305	2011	Honey Head	Alsea	\$0
OWEB	17070305	2011	Poked Again	Alsea	\$0
OWEB	17070305	2011	Honey Comb	Alsea	\$0
OWEB	17070305	2011	Honey Dew	Alsea	\$0
OWEB	17070306	2011	NE1068, Yachats Downhill	Alsea	\$0
OWEB	17070306	2011	Carpenter Ants	Siuslaw	\$0
OWEB	17070306	2011	Kimberly Creek Channel Reconstruction/Huff	Siltcoos	\$50,885
OWEB	17070306	2011	Kimberly Creek Channel Reconstruction/Pugh	Siltcoos	\$30,973
OWEB	17070306	2011	North Umpqua Gravel Augmentation	North Umpqua	\$131,327
OWEB	17070306	2011	Steamboat Instream Fish Habitat Restoration 2011	North Umpqua	\$207,756
OWEB	17070306	2011	White Creek Reconstruction & Rocking	North Umpqua	\$49,320
OWEB	17070306	2011	Cavitt 640 NE Reconstruction	North Umpqua	\$5,570
OWEB	17070306	2011	Evarts Road Reconstruction	North Umpqua	\$8,075
OWEB	17070306	2011	Shoup Bones	North Umpqua	\$0
OWEB	17070306	2011	Rock Creek Jct	North Umpqua	\$0

OWEB	17070306	2011	Moore NE Roads - Phase 2	South Umpqua	\$15,250
OWEB	17070306	2011	Olalla-Lookingglass Instream Restoration	South Umpqua	\$171,811
OWEB	17070306	2011	Union Log Road Reconstruction & Rocking	South Umpqua	\$40,540
OWEB	17070306	2011	Middle Jackson Creek Restoration	South Umpqua	\$779,092
OWEB	17070306	2011	Beals Mouth	South Umpqua	\$0
OWEB	17070306	2011	After Last	South Umpqua	\$0
OWEB	17070306	2011	Johns Lavadoure	South Umpqua	\$0
OWEB	17070306	2011	Jessica Beals	South Umpqua	\$0
OWEB	17070306	2011	Shively 16	South Umpqua	\$0
OWEB	17070306	2011	Condi Rice	South Umpqua	\$0
OWEB	17070307	2011	Lee Forty	South Umpqua	\$0
OWEB	17070307	2011	Elk Creek Riparian Planting	Umpqua	\$5,519
OWEB	17070307	2011	Cox Creek Riparian Planting	Umpqua	\$13,063
OWEB	17070307	2011	Richardson and Clarks Branch Creeks Riparian Restoration	Umpqua	\$15,704
OWEB	17070307	2011	Norton and Williams Creek Riparian Restoration	Umpqua	\$10,765
OWEB	17070307	2011	Stout Water Quality Project	Umpqua	\$9,549
OWEB	17070307	2011	Cox Creek Habitat Restoration	Umpqua	\$70,033
OWEB	17070307	2011	Seeley Creek Habitat Restoration	Umpqua	\$12,324
OWEB	17070307	2011	Elkton 41 #2	Umpqua	\$0
OWEB	17080001	2011	West Fork Smith River Instream Restoration	Umpqua	\$553,837
OWEB	17080001	2011	Hardscrabble and Jack Creeks Fish Passage Restoration	Umpqua	\$147,538
OWEB	17080001	2011	Little Camel Rocking	Umpqua	\$30,139
OWEB	17080001	2011	Little Salander Timber Sale 341-08-35	Umpqua	\$0
OWEB	17080001	2011	3590 Crossing	Umpqua	\$68,250
OWEB	17080001	2011	Lower Deer Timber Sale No. 341-10-30	Coos	\$10,397
OWEB	17080001	2011	Stulls Ridge #3: Timber Sale # 341-10-31	Coos	\$0
OWEB	17080001	2011	Jones Culvert Replacement Project, Project #04-10-007	Coos	\$16,567
OWEB	17080001	2011	Catching Slough Fish Passage Improvement 2011-Northern culvert	Coos	\$41,241
OWEB	17080001	2011	Daniels Creek Riparian Maintenance Project (Saltmarsh)	Coos	\$5,648

## Oregon Nonpoint Source Program 2012 Annual Report

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OWEB	17080001	2011	Palouse Creek Riparian Planting & Maintenance Project (Haga)	Coos	\$8,176
OWEB	17080001	2011	Palouse Creek Riparian Maintenance Project (ODF Ranch)	Coos	\$12,813
OWEB	17080001	2011	Larson Creek Riparian Maintenance Project	Coos	\$4,161
OWEB	17080001	2011	Dellwood Logyard & Oxbow Riparian Maintenance Project	Coos	\$9,213
OWEB	17080001	2011	Fredrickson Wetland Planting & Maintenance Project (WRP - Palouse Slough)	Coos	\$9,389
OWEB	17080001	2011	Catching Slough Fish Passage Improvement 2011-Southern culvert	Coos	\$61,861
OWEB	17080001	2011	Brunschmid Wetland Planting Maintenance Project (WRP)	Coos	\$6,736
OWEB	17080001	2011	Fern Hollows Farm Riparian Maintenance Project (Smith - SF Coos River)	Coos	\$12,862
OWEB	17080001	2011	Fern Hollows Farm Riparian Maintenance & Fish Passage Project (Smith - Rogers Creek)	Coos	\$11,156
OWEB	17080001	2011	Strain Ranch Riparian Maintenance Project (SF Coos River & Rogers Creek)	Coos	\$8,818
OWEB	17080001	2011	Winter Springs Ranch Riparian Maintenance Project (Jaberg - SF Coos River)	Coos	\$6,363
OWEB	17080001	2011	Hendrickson Creek Riparian Maintenance Project (Mahaffy)	Coos	\$3,727
OWEB	17080001	2011	Packard Creek Riparian Maintenance Project (Mahaffy)	Coos	\$5,483
OWEB	17080001	2011	Allegany Logyard Riparian Maintenance Project (Millicoma River)	Coos	\$12,224
OWEB	17080001	2011	Monson Bridges I	Coos	\$39,759
OWEB	17080001	2011	Monson Bridges II	Coos	\$39,759
OWEB	17080001	2011	Swanson Sediment Abatement II	Coos	\$161,643
OWEB	17080001	2011	West Fork Trib Fish Passage Improvement	Coos	\$46,243
OWEB	17080001	2011	Piledriver Creek Fish Passage Improvement	Coos	\$39,333
OWEB	17080003	2011	Tributary B Stream Crossing Removal	Coos	\$2,000
OWEB	17080003	2011	Haynes Way Fish Passage Improvement- Site1	Coos	\$38,873
OWEB	17080003	2011	Haynes Way Fish Passage Improvements- Site 2	Coos	\$14,943
OWEB	17080003	2011	Long Cougar Timber Sale #341-10-62	Coos	\$6,800

OWEB	17080003	2011	Joe Knife Timber Sale No. 341-07-48	Coos	\$4,264
OWEB	17080003	2011	Loose Shoes: Timber Sale # 341-11-22	Coos	\$0
OWEB	17080003	2011	South Marlow Switch: Timber Sale # 341-09-27	Coos	\$0
OWEB	17080003	2011	Kenstone Quarry Fish Passage	Coos	\$90,512
OWEB	17080003	2011	7101 Crossing	Coos	\$5,250
OWEB	17080003	2011	Camas Valley High School Riparian Fencing	Coquille	\$13,354
OWEB	17080003	2011	Elk Creek Sediment Abatement Project	Coquille	\$21,715
OWEB	17080003	2011	Lowe Creek Channel & Wetlands Restoration at Boatman Grove Phase II Completion	Coquille	\$175,025
OWEB	17080003	2011	Coquille North and East Fork Riparian Restoration	Coquille	\$59,358
OWEB	17080006	2011	King Ranch LLC Irrigation Efficiency Project #04-10-009	Coquille	\$79,597
OWEB	17080006	2011	Smith 2011 Irrigation Efficiency Project	Coquille	\$21,894
OWEB	17080006	2011	Ferry Creek Gravel Augmentation	Coquille	\$12,345
OWEB	17080006	2011	Upper Rock Cr 16	Coquille	\$0
OWEB	17080006	2011	Upper Rock Creek 19-11 Unit 1	Coquille	\$0
OWEB	17080006	2011	Mule Skinner	Coquille	\$0
OWEB	17080006	2011	Munster Mash	Coquille	\$0
OWEB	17080006	2011	Munny Matters	Coquille	\$0
OWEB	17080006	2011	Slate Roof	Coquille	\$0
OWEB	17080006	2011	Yasukawa Cedar Creek Fish Passage	Sixes	\$15,608
OWEB	17090001	2011	Morton Creek Channel Re-alignment	Sixes	\$132,235
OWEB	17090001	2011	Euchre Creek South Coast Mainstem Large Wood and Riparian 2010	Sixes	\$40,192
OWEB	17090001	2011	Euchre Creek Dishner Mainstem Large Wood and Riparian 2010	Sixes	\$36,514
OWEB	17090001	2011	South Coast Rain Gardens / Bioswales - City of Port Orford	Sixes	\$5,837
OWEB	17090001	2011	South Coast Rain Gardens / Bioswales - Langlois Library	Sixes	\$5,837
OWEB	17090001	2011	Clatie Smith Ranch Offstream Water Systems	Sixes	\$12,990
OWEB	17090001	2011	Azevedo AgWQ Restoration	Sixes	\$17,998
OWEB	17090001	2011	Guerin Creek Fish Passage and Wood Placement	Sixes	\$45,697

OWEB	17090001	2011	South Langlois Creek Restoration 2010	Sixes	\$42,057
OWEB	17090001	2011	Dry Run Creek Fish Passage	Sixes	\$80,117
OWEB	17090001	2011	Euchre Creek Tributary Restoration 2010	Sixes	\$39,005
OWEB	17090001	2011	Red Sugar 2	Sixes	\$0
OWEB	17090001	2011	Red Rock Super 35, Unit 1 & Unit 2	Sixes	\$0
OWEB	17090001	2011	Rusty Slide 15	Sixes	\$0
OWEB	17090001	2011	Little Butte Water Quality Improvement	Upper Rogue	\$205,971
OWEB	17090001	2011	Upper Stratton Creek	Upper Rogue	\$2,000
OWEB	17090001	2011	West Branch Elk and Alco Creek Habitat Enhancement	Upper Rogue	\$74,660
OWEB	17090001	2011	Limpy Creek Stream Restoration	Middle Rogue	\$106,496
OWEB	17090001	2011	Quartz Creek Salmon Habitat Restoration	Middle Rogue	\$85,739
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$8,219
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$422
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$2,915
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$14,557
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$5,810
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$3,931
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$7,120
OWEB	17090001	2011	Riparian Restoration and Stewardship Program	Middle Rogue	\$3,507
OWEB	17090001	2011	Brandeau Powell Creek Restoration	Applegate	\$12,335
OWEB	17090001	2011	OWEB 209-2037 Williams Creek Ditch Improvement	Applegate	\$219,406
OWEB	17090001	2011	West Fork Williams Creek Stream Restoration	Applegate	\$70,300
OWEB	17090001	2011	South Coast Rain Gardens / Bioswales - City of Gold Beach	Lower Rogue	\$5,837
OWEB	17090001	2011	Gadberry Riparian Restoration Project	Lower Rogue	\$72,338
OWEB	17090001	2011	Lower Rogue Resilient Forest Project 1	Lower Rogue	\$6,419
OWEB	17090001	2011	Lower Rogue Resilient Forest Project 1 (Part 2)	Lower Rogue	\$6,975
OWEB	17090002	2011	Tucker Ditch Push Up Dam Removal	Lower Rogue	\$224,976
OWEB	17090002	2011	East Fork Edson Creek Fish Passage Restoration	Lower Rogue	\$230,935
OWEB	17090002	2011	Dollarhide Irrigation Improvement Project OWEB 207-055	Illinois	\$104,065
OWEB	17090002	2011	Winchuck Knotweed 2009	Chetco	\$4,499

OWEB	17090002	2011	Lime Kiln/Imbach Livestock Distribution Project	Harney-Malheur Lakes	\$16,959
OWEB	17090002	2011	Five Creeks-Steens Mountain Ranch Restoration Project	Harney-Malheur Lakes	\$162,036
OWEB	17090002	2011	Blackburn Boulder Spring Development	Silvies	\$7,906
OWEB	17090002	2011	Horse Spring Canyon Juniper Control	Silvies	\$14,480
OWEB	17090003	2011	Lake Creek Forest Restoration	Silvies	\$11,923
OWEB	17090003	2011	Poplars Ranch Juniper Treatment Project	Silver	\$16,719
OWEB	17090003	2011	Douglas Riparian Fence	Summer Lake	\$11,332
OWEB	17090003	2011	24 Ranch Juniper cut	Summer Lake	\$5,185
OWEB	17090003	2011	Withers Ranch Western Meadowlark Habitat Enhancement	Summer Lake	\$49,763
OWEB	17090003	2011	Grassy Basin Range Improvement	Alvord Lake	\$15,701
OWEB	17090003	2011	Hess Irrigation Efficiency	Sprague	\$40,389
OWEB	17090003	2011	Sprague River Riparian Fence	Sprague	\$17,775
OWEB	17090003	2011	North Fork Sprague River / Bailey Flat	Sprague	\$226,447
OWEB	17090003	2011	North Fork Sprague River Fish Passage	Sprague	\$751,155
OWEB	17090003	2011	Fourmile Creek and Harriman Spring Restoration	Upper Klamath Lake	\$347,938
OWEB	17090003	2011	Horseshoe Ranch - Wood River Restoration	Upper Klamath Lake	\$45,429
OWEB	17090003	2011	Sevenmile Creek Passage	Upper Klamath Lake	\$138,789
OWEB	17090003	2011	Simms Ranch Juniper Cut	Goose Lake	\$10,015
OWEB	17090003	2011	Antelope Creek Riparian Fencing Project	Goose Lake	\$7,865
OWEB	17090003	2011	Kelley Creek Culvert Removal-Bridge Replacement	Goose Lake	\$99,516
OWEB	17090003	2011	Lakeview School District Riparian Fencing Project	Goose Lake	\$13,455
	17090003				
EQIP	17090003	2012	Irrigation Pipeline		\$13,894
EQIP	17090003	2012	Irrigation System, Sprinkler		\$124,597
EQIP	17090003	2012	Pumping Plant		\$1,840
EQIP	17090003	2012	Structure for Water Control		\$520
AWEP	17090003	2012	Irrigation Pipeline		\$23,531
AWEP	17090003	2012	Irrigation Water Conveyance, Pipeline, High-Pressure, Underground, Plastic		\$10,527
AWEP	17090003	2012	Irrigation System, Sprinkler		\$85,617

EQIP	17090003	2012	Range Planting		\$23,973
EQIP	17090003	2012	Water Well		\$4,253
WHIP	17090003	2012	Conservation Cover		\$2,357
WHIP	17090003	2012	Fence		\$26,560
WHIP	17090003	2012	Tree/Shrub Establishment		\$430
EQIP	17090003	2012	Spring Development		\$1,288
EQIP	17090003	2012	Nutrient Management		\$600
EQIP	17090003	2012	Watering Facility		\$810
EQIP	17090003	2012	Waste Treatment		\$9,480
EQIP	17090003	2012	Comprehensive Nutrient Management Plan - Written		\$9,900
EQIP	17090003	2012	Conservation Cover		\$7,311
EQIP	17090003	2012	Mulching		\$2,346
EQIP	17090003	2012	Integrated Pest Management (IPM)		\$710
EQIP	17090003	2012	Comprehensive Nutrient Management Plan - Written		\$8,250
EQIP	17090003	2012	Irrigation System, Microirrigation		\$29,775
EQIP	17090003	2012	Integrated Pest Management (IPM)		\$4,002
EQIP	17090003	2012	Orchard and Vinyard Air Quality Management		\$15,665
EQIP	17090003	2012	Comprehensive Nutrient Management Plan - Written		\$14,400
EQIP	17090003	2012	Fence		\$27,033
EQIP	17090003	2012	Irrigation Water Management		\$278
EQIP	17090003	2012	Forage and Biomass Planting		\$1,253
EQIP	17090003	2012	Water Well		\$4,716
EQIP	17090003	2012	Comprehensive Nutrient Management Plan - Written		\$4,500
EQIP	17090003	2012	Irrigation Water Conveyance, Pipeline, High-Pressure, Underground, Plastic		\$40,382
EQIP	17090003	2012	Residue and Tillage Management, No-Till/Strip Till/Direct Seed		\$4,268
EQIP	17090003	2012	Irrigation System, Microirrigation		\$7,400
EQIP	17090003	2012	Irrigation Water Management		\$2,085
EQIP	17090003	2012	Prescribed Grazing		\$110

EQIP	17090003	2012	Structure for Water Control		\$1,500
EQIP	17090004	2012	Upland Wildlife Habitat Management		\$638
EQIP	17090004	2012	Conservation Cover		\$593
EQIP	17090004	2012	Riparian Forest Buffer		\$580
EQIP	17090004	2012	Irrigation System, Microirrigation		\$8,645
EQIP	17090004	2012	Pumping Plant		\$3,233
EQIP	17090004	2012	Range Planting		\$4,266
EQIP	17090004	2012	Comprehensive Nutrient Management Plan - Written		\$4,500
WHIP	17090004	2012	Woody Residue Treatment		\$8,442
EQIP	17090004	2012	Conservation Cover		\$15,413
EQIP	17090004	2012	Conservation Crop Rotation		\$3,095
EQIP	17090004	2012	Cover Crop		\$6,229
EQIP	17090004	2012	Nutrient Management		\$2,080
EQIP	17090004	2012	Integrated Pest Management (IPM)		\$2,340
EQIP	17090004	2012	Conservation Crop Rotation		\$433
EQIP	17090004	2012	Nutrient Management		\$1,477
EQIP	17090004	2012	Integrated Pest Management (IPM)		\$2,303
EQIP	17090004	2012	Streambank and Shoreline Protection		\$33,228
WHIP	17090004	2012	Fence		\$16,662
WHIP	17090004	2012	Livestock Pipeline		\$3,697
WHIP	17090004	2012	Spring Development		\$6,489
WHIP	17090004	2012	Watering Facility		\$5,344
EQIP	17090004	2012	Irrigation Water Conveyance, Pipeline, High-Pressure, Underground, Plastic		\$16,457
EQIP	17090004	2012	Irrigation System, Sprinkler		\$788
EQIP	17090004	2012	Structure for Water Control		\$5,400
EQIP	17090004	2012	Brush Management		\$386
EQIP	17090004	2012	Fence		\$2,013
EQIP	17090004	2012	Mulching		\$190
EQIP	17090004	2012	Waste Storage Facility		\$23,199



EQIP	17090004	2012	Conservation Crop Rotation		\$858
EQIP	17090004	2012	Tree/Shrub Site Preparation		\$1,812
EQIP	17090004	2012	Prescribed Grazing		\$334
EQIP	17090004	2012	Nutrient Management		\$1,511
EQIP	17090004	2012	Integrated Pest Management (IPM)		\$2,037
EQIP	17090004	2012	Tree/Shrub Establishment		\$31,673
EQIP	17090004	2012	Forest Stand Improvement		\$1,279
EQIP	17090004	2012	Fish and Wildlife Structure		\$216
EQIP	17090004	2012	Fence		\$3,386
EQIP	17090004	2012	Heavy Use Area Protection		\$9,727
EQIP	17090004	2012	Brush Management		\$402
EQIP	17090004	2012	Fence		\$5,804
EQIP	17090004	2012	Irrigation Water Management		\$632
EQIP	17090004	2012	Heavy Use Area Protection		\$3,380
EQIP	17090004	2012	Animal Trails and Walkways		\$772
EQIP	17090004	2012	Nutrient Management		\$19,078
EQIP	17090004	2012	Irrigation System, Sprinkler		\$662
EQIP	17090004	2012	Access Road		\$1,294
EQIP	17090004	2012	Irrigation Water Management		\$1,516
EQIP	17090004	2012	Nutrient Management		\$788
EQIP	17090004	2012	Waste Storage Facility		\$1,573
EQIP	17090004	2012	Brush Management		\$5,114
EQIP	17090004	2012	Fence		\$53,089
EQIP	17090004	2012	Irrigation System, Sprinkler		\$75,000
EQIP	17090004	2012	Forage and Biomass Planting		\$1,139
EQIP	17090004	2012	Solid/Liquid Waste Separation Facility		\$11,763
EQIP	17090004	2012	Conservation Cover		\$2,498
EQIP	17090004	2012	Irrigation Water Management		\$3,866
EQIP	17090004	2012	Nutrient Management		\$2,108
EQIP	17090004	2012	Integrated Pest Management (IPM)		\$17,142

EQIP	17090004	2012	Irrigation Pipeline		\$11,344
EQIP	17090004	2012	Irrigation System, Sprinkler		\$88,624
EQIP	17090004	2012	Waste Transfer		\$20,000
AWEP	17090004	2012	Irrigation Pipeline		\$22,849
AWEP	17090005	2012	Irrigation Water Management		\$17,759
AWEP	17090005	2012	Nutrient Management		\$27,514
AWEP	17090005	2012	Integrated Pest Management (IPM)		\$27,514
EQIP	17090005	2012	Brush Management		\$602
EQIP	17090005	2012	Residue and Tillage Management, No-Till/Strip Till/Direct Seed		\$3,335
EQIP	17090005	2012	Fence		\$10,567
EQIP	17090005	2012	Irrigation Pipeline		\$2,365
EQIP	17090005	2012	Irrigation System, Sprinkler		\$12,624
EQIP	17090006	2012	Irrigation Water Management		\$821
EQIP	17090006	2012	Forage Harvest Management		\$893
EQIP	17090006	2012	Pumping Plant		\$1,210
EQIP	17090006	2012	Tree/Shrub Establishment		\$2,114
EQIP	17090006	2012	Underground Outlet		\$1,592
EQIP	17090006	2012	Solid/Liquid Waste Separation Facility		\$11,613
EQIP	17090006	2012	Waste Transfer		\$8,719
WHIP	17090006	2012	Brush Management		\$529
AWEP	17090006	2012	Cover Crop		\$881
AWEP	17090006	2012	Riparian Forest Buffer		\$6,811
AWEP	17090006	2012	Irrigation Pipeline		\$1,712
AWEP	17090006	2012	Irrigation Water Conveyance, Pipeline, High-Pressure, Underground, Plastic		\$10,000
AWEP	17090006	2012	Irrigation System, Microirrigation		\$118,859
AWEP	17090006	2012	Tree/Shrub Site Preparation		\$461
AWEP	17090007	2012	Tree/Shrub Establishment		\$54,397
AWEP	17090007	2012	Forest Stand Improvement		\$889

EQIP	17090007	2012	Forest Management Plan - Written		\$1,866
EQIP	17090007	2012	Brush Management		\$930
EQIP	17090007	2012	Residue and Tillage Management, No-Till/Strip Till/Direct Seed		\$3,925
EQIP	17090007	2012	Tree/Shrub Establishment		\$12,826
EQIP	17090007	2012	Seasonal High Tunnel System for Crops		\$5,597
EQIP	17090007	2012	Nutrient Management		\$620
EQIP	17090007	2012	Tree/Shrub Establishment		\$2,170
EQIP	17090007	2012	Comprehensive Nutrient Management Plan - Written		\$3,000
EQIP	17090007	2012	Fence		\$4,946
EQIP	17090007	2012	Irrigation Pipeline		\$1,443
EQIP	17090007	2012	Irrigation System, Microirrigation		\$551
EQIP	17090007	2012	Access Control		\$702
EQIP	17090007	2012	Livestock Pipeline		\$683
EQIP	17090007	2012	Watering Facility		\$341
EQIP	17090007	2012	Nutrient Management		\$36,583
EQIP	17090007	2012	Roof Runoff Structure		\$1,057
EQIP	17090007	2012	Access Road		\$8,820
EQIP	17090007	2012	Tree/Shrub Site Preparation		\$288
EQIP	17090007	2012	Fence		\$6,551
EQIP	17090007	2012	Livestock Pipeline		\$1,886
EQIP	17090007	2012	Watering Facility		\$1,334
AWEP	17090007	2012	Irrigation System, Sprinkler		\$9,977
EQIP	17090008	2012	Conservation Cover		\$168
EQIP	17090008	2012	Irrigation System, Microirrigation		\$2,858
EQIP	17090008	2012	Irrigation Water Management		\$336
AWEP	17090008	2012	Access Control		\$33,984
AWEP	17090008	2012	Prescribed Grazing		\$6,445
EQIP	17090008	2012	Fence		\$3,173
EQIP	17090008	2012	Range Planting		\$773

AWEP	17090008	2012	Access Control		\$70,585
AWEP	17090008	2012	Fence		\$3,505
AWEP	17090008	2012	Irrigation Water Conveyance, Pipeline, High-Pressure, Underground, Plastic		\$64,011
AWEP	17090008	2012	Irrigation System, Sprinkler		\$241,079
AWEP	17090009	2012	Irrigation System, Surface and Subsurface		\$16,296
AWEP	17090009	2012	Irrigation Water Management		\$975
AWEP	17090009	2012	Pumping Plant		\$28,500
AWEP	17090009	2012	Structure for Water Control		\$14,924
AWEP	17090009	2012	Nutrient Management		\$3,319
EQIP	17090009	2012	Conservation Crop Rotation		\$1,838
EQIP	17090009	2012	Forage Harvest Management		\$2,187
EQIP	17090009	2012	Integrated Pest Management (IPM)		\$4,364
319	17090009	2012	Salmon-Safe Certification of Sweet Cherries in Umatilla County and Wasco County	Umatilla / Wasco	\$55,000
319	17090009	2012	Milton-Freewater Levee Setback and Habitat Enhancements	Walla Walla	\$96,000
319	17090009	2012	Stream Simulation Trailer	Grande Ronde	\$2,500
319	17090009	2012	Filter Strip Water Quality Improvement	Owyhee	\$25,300
319	17090009	2012	Owyhee River Improvement Project - Phase 3	Owyhee	\$38,000
319	17090009	2012	Channel Restoration Bioassessment in Eastern Oregon	Easter Oregon	\$44,200
319	17090009	2012	Upper Nehalem Riparian Restoration	Upper Nehalem	\$52,509
319	17090009	2012	Tualatin Pesticide Collection Event	Tualatin	\$28,897
319	17090009	2012	Backyard Planting Program Yr 10	Tillamook	\$53,115
319	17090010	2012	South Fork Nehalem Dairy Farm Riparian Enhancement	Lower Nehalem	\$17,434
319	17090010	2012	Tillamook SWCD 2012 Stream Enhancement and Restoration	Tillamook	\$35,925
319	17090010	2012	Nestucca Riparian Restoration	Nestucca-Neskowin	\$53,115
319	17090010	2012	Connecting People to WQ - Little Actions Make a Big Difference	Clackamas	\$20,000
319	17090010	2012	Morgan Creek Assessment and Restoration Project	Morgan Creek	\$45,000
319	17090010	2012	SWVGWMA Partners and Stakeholders Action Project	S. Willamette Valley	\$43,471

				Ground-water management area	
319	17090010	2012	Mid-Coast BMP Implementation Project	Mid-Coast	\$45,420
319	17090010	2012	Stream Smart: Bear Creek Clean Water Project marketing campaign	Bear Creek	\$18,900
319	17090010	2012	Little Butte Creek Water Quality – Frey Phase	Butte Creek	\$20,000
319	17090010	2012	Little Applegate Sig POD Measuring Device Project	Applegate	\$7,000
319	17090010	2012	Nitrogen Sources in a Tidally-Restricted Estuary	Curry	\$13,419
319	17090010	2012	Garrison Lake Septic Revitalization Project	Garrison Lake	\$7,186
319	17090010	2012	S. Fork Coquille River Action Plan	Coquille	\$14,850
319	17090010	2012	Santiam Calapooia WQ Monitoring Project	Santiam-Calapooia	\$45,754
319	17090010	2012	ODF Ripstream: Downstream temperature response to harvest	North-Mid range	\$30,000
319	17090010	2012	Willamette Model Watershed Riparian Revegetation	Willamette	\$20,000
319	17090010	2012	PSP (Pesticide Stewardship Partnership)	Willamette	\$72,005
OWEB	17090010	2010	Oregon Raceway Park Erosion Control	Lower John Day	\$3,621
OWEB	17090010	2010	Salmon Creek Fish Barrier Correction	Lower Willamette	\$218,685
OWEB	17090010	2010	Three Sisters Irrigation District McKenzie Canyon Phase 1 Piping Project	Upper Deschutes	\$323,000
OWEB	17090010	2010	Roger Smith Pasture Restoration	Lower John Day	\$4,939
OWEB	17090010	2010	Rock Creek Water Crossing	Lower John Day	\$4,999
OWEB	17090010	2010	Grassy Basin Range Improvement	Alvord Lake	\$7,190
OWEB	17090010	2010	Weathers Ranch Spring Development	Umatilla	\$5,925
OWEB	17090010	2010	Buford Park False Brome Control	Coast Fork Willamette	\$9,937
OWEB	17090010	2010	Yasukawa Cedar Creek Fish Passage	Sixes	\$10,000
OWEB	17090010	2010	Elk Creek Riparian Planting	Umpqua	\$3,695
OWEB	17090011	2010	Tweedle Creek LWD Placement	Nehalem	\$9,588
OWEB	17090011	2010	Skyline School Native Plant Garden SG#13-08-014	Tualatin	\$9,378
OWEB	17090011	2010	Cox Creek Riparian Planting	Umpqua	\$9,810
OWEB	17090011	2010	Willow Creek Rechannelization	Willow	\$13,490
OWEB	17090011	2010	Thomas Angus Keating Spring Development	Powder	\$6,796

## Oregon Nonpoint Source Program 2012 Annual Report

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OWEB	17090011	2010	Morton Creek Channel Re-alignment	Sixes	\$19,595
OWEB	17090011	2010	Euchre Creek South Coast Mainstem Large Wood and Riparian 2010	Sixes	\$16,267
OWEB	17090011	2010	Euchre Creek Dishner Mainstem Large Wood and Riparian 2010	Sixes	\$8,014
OWEB	17090011	2010	South Coast Rain Gardens / Bioswales - City of Port Orford	Sixes	\$3,171
OWEB	17090011	2010	Blackburn Boulder Spring Development	Silvies	\$6,028
OWEB	17090012	2010	Not Dry Gulch Offstream Watering Project	Powder	\$23,736
OWEB	17090012	2010	Lovlett Creek Crossing	North Fork John Day	\$4,287
OWEB	17090012	2010	North Fork Klaskanine Restoration of Knotweed-Treated Areas	Lower Columbia	\$9,798
OWEB	17090012	2010	South Coast Rain Gardens / Bioswales - City of Gold Beach	Lower Rogue	\$3,171
OWEB	17090012	2010	South Coast Rain Gardens / Bioswales - Langlois Library	Sixes	\$3,171
OWEB	17090012	2010	Sandahl Irrigation Improvement Project	Middle Columbia-Hood	\$9,550
OWEB	17090012	2010	Charles Daly Upland Livestock Water	Umatilla	\$3,877
OWEB	17090012	2010	Misty Mountain Wildlife Habitat Enhancement	Upper Grande Ronde	\$10,000
OWEB	17090012	2010	Gooseneck Creek Restoration	Yamhill	\$94,401
OWEB	17090012	2010	Dopp Creek Wetland and Upland Restoration	Yamhill	\$4,265
OWEB	17090012	2010	Douglas Riparian Fence	Summer Lake	\$7,537
OWEB	17090012	2010	Tryon Creek Off-Channel Habitat Enhancement	Lower Willamette	\$100,000
OWEB	17090012	2010	Simms Ranch Juniper Cut	Goose Lake	\$7,770
OWEB	17090012	2010	Wendling 15022	McKenzie	\$0
OWEB	17090012	2010	Lower Deer Timber Sale No. 341-10-30	Coos	\$0
OWEB	17090012	2010	Upper Clear Creek Habitat Improvement Project	Clackamas	\$62,773
OWEB	17090012	2010	Luckiamute Watershed Council - Falls City Riparian Restoration	Middle Willamette	\$3,624
OWEB	17090012	2010	Stulls Ridge #3: Timber Sale # 341-10-31	Coos	\$0
OWEB	17090012	2010	Lower Rudio Creek Restoration	North Fork John Day	\$171,147
OWEB	17090012	2010	24 Ranch Juniper cut	Summer Lake	\$3,525
OWEB	17090012	2010	Richardson and Clarks Branch Creeks Riparian Restoration	Umpqua	\$4,699

OWEB	17090012	2010	McCoy Upland Water Quality Project	Coast Fork Willamette	\$10,000
OWEB	17090012	2010	Norton and Williams Creek Riparian Restoration	Umpqua	\$8,165
OWEB	17090012	2010	Dollarhide Irrigation Improvement Project OWEB 207-055	Illinois	\$58,600
OWEB	17090012	2010	Camp Creek Tie	McKenzie	\$0
OWEB	17090012	2010	Childers 2000	Upper Willamette	\$0
OWEB	17090012	2010	McGowan 120 / 400	McKenzie	\$0
OWEB	17090012	2010	Van Kleek Riparian Restoration	Middle Willamette	\$7,172
OWEB	17090012	2010	LFC 7067/7500	Middle Willamette	\$0
OWEB	17100201	2010	LFC 170 TIE	Middle Willamette	\$0
OWEB	17100201	2010	BK 800 / 900	McKenzie	\$0
OWEB	17100201	2010	Gilbertson Wildlife Habitat Restoration	Middle Willamette	\$1,843
OWEB	17100201	2010	Moore NE Roads - Phase 2	South Umpqua	\$0
OWEB	17100201	2010	Mt. Richmond Wetland Enhancement Project	Tualatin	\$1,733
OWEB	17100201	2010	Kimberly Creek Channel Reconstruction/Huff	Siltcoos	\$9,636
OWEB	17100202	2010	Clatie Smith Ranch Offstream Water Systems	Sixes	\$9,990
OWEB	17100202	2010	Stark Range Management	Lower John Day	\$1,742
OWEB	17100202	2010	Old Lucky Livestock Water	Umatilla	\$6,610
OWEB	17100202	2010	Poplars Ranch Juniper Treatment Project	Silver	\$9,999
OWEB	17100202	2010	Nettle Creek Riparian Restoration Partnership	Lower Willamette	\$8,599
OWEB	17100202	2010	Rudio Creek Fish Passage Improvement	North Fork John Day	\$3,004
OWEB	17100202	2010	Gadberry Riparian Restoration Project	Lower Rogue	\$10,000
OWEB	17100202	2010	McKinney Creek Riparian Enhancement	Willow	\$5,485
OWEB	17100202	2010	26-08-023 McBee Wetland Enhancement	Umatilla	\$5,787
OWEB	17100202	2010	Joe Creek Restoration Project - Riparian Planting 2011	Necanicum	\$3,102
OWEB	17100202	2010	Stout Water Quality Project	Umpqua	\$7,519
OWEB	17100202	2010	Homestead Irrigation Efficiency	Jordan	\$182,259
OWEB	17100202	2010	Alley Upland Erosion Control	Lower Deschutes	\$4,286
OWEB	17100202	2010	Camas Valley High School Riparian Fencing	Coquille	\$3,880
OWEB	17100202	2010	Mosier Creek Riparian Restoration - Matthisen	Middle Columbia-Hood	\$5,700
OWEB	17100202	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1	Lower Columbia-Sandy	\$50,000

			Dabney		
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 city of sandy	Lower Columbia-Sandy	\$69,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Sleepy Hollow	Lower Columbia-Sandy	\$15,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Wilsons	Lower Columbia-Sandy	\$15,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Confluence	Lower Columbia-Sandy	\$15,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Lower Salmon BLM	Lower Columbia-Sandy	\$30,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Arrah Wanna	Lower Columbia-Sandy	\$18,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Golf Course	Lower Columbia-Sandy	\$10,000
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Lower Gorge	Lower Columbia-Sandy	\$0
OWEB	17100203	2010	Sandy Basin Anchor Habitat Vegetation Restoration Phase 1 Welches to USFS	Lower Columbia-Sandy	\$0
OWEB	17100203	2010	Ruby Planting project	Wilson-Trask-Nestucca	\$39,615
OWEB	17100203	2010	Little Butte Water Quality Improvement	Upper Rogue	\$10,000
OWEB	17100204	2010	Tobin Headbox and Weir	Powder	\$7,586
OWEB	17100204	2010	Enriquez Irrigation Improvement Project	Middle Columbia-Hood	\$8,725
OWEB	17100204	2010	Stanfield Irrigation District C-Line Project	Umatilla	\$40,066
OWEB	17100204	2010	Livestock Exclusion Project	Middle Willamette	\$8,185
OWEB	17100204	2010	Smith Farms Drip Irrigation	Lower Deschutes	\$9,803
OWEB	17100204	2010	Martin Water Quality Improvement	Powder	\$6,700
OWEB	17100204	2010	Antelope Creek Riparian Fencing Project	Goose Lake	\$6,180
OWEB	17100204	2010	Hess Irrigation Efficiency	Sprague	\$29,544
OWEB	17100204	2010	Union Substation Riparian Enhancement Project	Middle Columbia-Hood	\$675
OWEB	17100204	2010	Esau Canyon Sediment Control	Lower John Day	\$22,835



OWEB	17100204	2010	Lime Kiln/Imbach Livestock Distribution Project	Harney-Malheur Lakes	\$9,885
OWEB	17100204	2010	Upper Yachats River Restoration	Alsea	\$0
OWEB	17100204	2010	Withers Ranch Western Meadowlark Habitat Enhancement	Summer Lake	\$22,763
OWEB	17100204	2010	Maunder Wetland Enhancement	Trout	\$4,165
OWEB	17100204	2010	03-10-008 Mackall Riparian Planting	Alsea	\$9,397
OWEB	17100204	2010	Marvin Thompson Upland Wildlife Water Project	Lower John Day	\$3,950
OWEB	17100204	2010	Stone Cabin Spring Development	Lower John Day	\$4,600
OWEB	17100204	2010	Murphy Wetland Restoration	Upper Willamette	\$9,066
OWEB	17100204	2010	Anderson Windbreak II	Upper Grande Ronde	\$5,097
OWEB	17100204	2010	Lower Mill Creek Riparian Restoration	Middle Columbia-Hood	\$115
OWEB	17100204	2010	Badger Creek Reforestation	Lower Columbia-Sandy	\$1,382
OWEB	17100204	2010	Elk Creek Sediment Abatement Project	Coquille	\$9,989
OWEB	17100204	2010	Stewart Ditch Piping Efficiency	Walla Walla	\$3,029
OWEB	17100204	2010	Gotcher Juniper Removal Project	Lower Crooked	\$2,130
OWEB	17100204	2010	Olsen Sediment Control	Lower Deschutes	\$1,130
OWEB	17100204	2010	Vale Water Quality Improvement Project Lateral 230	Willow	\$382,821
OWEB	17100204	2010	Grand Irrigation Efficiency	Lower Owyhee	\$43,653
OWEB	17100204	2010	Donnelly Basin Upland Improvement	Lower John Day	\$5,690
OWEB	17100205	2010	Fisher Park Creek Enhancement Project	Lower Willamette	\$4,431
OWEB	17100205	2010	100 Acre Sprinkler Conversion	Lower Malheur	\$10,000
OWEB	17100205	2010	Payton Erosion Control	Yamhill	\$8,711
OWEB	17100205	2010	Ron Quant LLC Juniper Removal	Lower John Day	\$4,000
OWEB	17100205	2010	Hawk Irrigation Enhancement Phase II	Middle Snake-Succor	\$34,679
OWEB	17100205	2010	Winchuck Knotweed 2009	Chetco	\$3,508
OWEB	17100205	2010	Sagebrush Springs Lechner WQ	Trout	\$5,331
OWEB	17100205	2010	Vanek Drip Irrigation	Lower Deschutes	\$9,745
OWEB	17100205	2010	MM Riparian Area Protection	Upper Deschutes	\$9,902
OWEB	17100205	2010	Reducing Soil Erosion through Direct Seed - Ferguson	Walla Walla	\$1,400
OWEB	17100205	2010	Reducing Soil Erosion through Direct Seed - Wilson	Umatilla	\$1,033
OWEB	17100205	2010	Tweedt Juniper Removal Project	Upper Crooked	\$1,932

OWEB	17100205	2010	Metolius River Fish Habitat	Upper Deschutes	\$248,395
OWEB	17100205	2010	Lowe Creek Channel & Wetlands Restoration at Boatman Grove Phase II Completion	Coquille	\$71,500
OWEB	17100205	2010	Ant Creek Juniper Removal	Upper Crooked	\$111,621
OWEB	17100205	2010	Sage Mud and Manure	Nehalem	\$10,000
OWEB	17100205	2010	Padget Upland Erosion Control	Lower John Day	\$2,974
OWEB	17100205	2010	Coquille North and East Fork Riparian Restoration	Coquille	\$32,484
OWEB	17100205	2010	Sutliff Oak Savanna Restoration Project	Upper Willamette	\$6,733
OWEB	17100205	2010	Hasenbank Ranch Watershed Improvement - 211-6006	Umatilla	\$41,771
OWEB	17100206	2010	Bear Creek Rangeland Management Enhancement	Umatilla	\$5,346
OWEB	17100206	2010	Elder Ditch Pipeline Conversion - 208-5058	Umatilla	\$45,186
OWEB	17100206	2010	Kollas Road Irrigation Improvement Project	Middle Columbia-Hood	\$9,600
OWEB	17100207	2010	Fox Hollow Irrigation Efficiency	Lower Deschutes	\$9,563
OWEB	17100207	2010	Upper Cow Hollow Water Quality	Lower Grande Ronde	\$28,747
OWEB	17100207	2010	Sale Spring Development Project	Lower Crooked	\$6,345
OWEB	17100207	2010	Park Pasture Livestock Water Developments	Lower John Day	\$4,635
OWEB	17100301	2010	Tieman Creek Cattle Crossing project	Middle Columbia-Hood	\$0
OWEB	17100301	2010	Lower Rogue Resilient Forest Project 1	Lower Rogue	\$4,419
OWEB	17100301	2010	Lower Rogue Resilient Forest Project 1 (Part 2)	Lower Rogue	\$5,334
OWEB	17100301	2010	Azevedo AgWQ Restoration	Sixes	\$10,000
OWEB	17100301	2010	Limpy Creek Stream Restoration	Middle Rogue	\$79,758
OWEB	17100301	2010	Farmer Creek LWD Placement	Wilson-Trask-Nestucca	\$9,056
OWEB	17100301	2010	Sprague River Riparian Fence	Sprague	\$9,900
OWEB	17100301	2010	Quartz Creek Salmon Habitat Restoration	Middle Rogue	\$65,884
OWEB	17100301	2010	Kelley Creek Culvert Removal-Bridge Replacement	Goose Lake	\$9,906
OWEB	17100301	2010	Oxbow Tailings Restoration - Phase 1	Middle Fork John Day	\$97,600
OWEB	17100301	2010	Lakeview School District Riparian Fencing Project	Goose Lake	\$2,420
OWEB	17100301	2010	Tucker Ditch Push Up Dam Removal	Lower Rogue	\$32,559
OWEB	17100301	2010	Gordon Creek Restoration	Tualatin	\$6,573
OWEB	17100301	2010	Moore Brothers Upland Erosion Control	Lower Deschutes	\$3,668

OWEB	17100302	2010	Knox Place Water System	North Fork John Day	\$56,104	
OWEB	17100302	2010	West Fork Meadow Brook Riparian Improvements	North Fork John Day	\$60,297	
OWEB	17100302	2010	Applegate Farm Wetland Restoration	Upper Willamette	\$10,000	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$6,309	
OWEB	17100302	2010	Milk Ranch Grazing Management	North Fork John Day	\$3,221	
OWEB	17100302	2010	Lower Kayser Fish Passage Improvements	Lower John Day	\$58,090	
OWEB	17100302	2010	Little Indian Creek Riparian Exclosure Fence OWEB #208-5048	Upper Grande Ronde	\$18,590	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$324	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$2,238	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$11,175	
OWEB	17100302	2010	Guerin Creek Fish Passage and Wood Placement	Sixes	\$39,147	
OWEB	17100302	2010	South Langlois Creek Restoration 2010	Sixes	\$34,498	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$4,460	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$3,017	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$5,466	
OWEB	17100302	2010	Riparian Restoration and Stewardship Program	Middle Rogue	\$2,692	
OWEB	17100302	2010	Dry Run Creek Fish Passage	Sixes	\$17,709	
OWEB	17100302	2010	Phelps Spring Development	North Fork John Day	\$4,248	
OWEB	17100302	2010	Moose Creek Steelhead Habitat Improvement	South Santiam	\$71,055	
OWEB	17100302	2010	Euchre Creek Tributary Restoration 2010	Sixes	\$33,005	
OWEB	17100302	2010	East Fork Edson Creek Fish Passage Restoration	Lower Rogue	\$24,435	
OWEB	17100302	2010	Johnson Irrigation Efficiency Upgrade	Middle Columbia-Hood	\$10,000	
OWEB	17100303	2010	Mitchell Point Ivy Abatement Project	Middle Columbia-Hood	\$4,222	
OWEB	17100303	2010	Kitchen Creek Grazing & Wildlife Development	Burnt	\$10,000	
OWEB	17100303	2010	Sandhollow Feedlot Rehabilitation	Lower Malheur	\$31,556	
OWEB	17100303	2010	R. Sadlowsky Spring Development	Powder	\$7,420	
OWEB	17100303	2010	Warm Springs Cross Fencing	Powder	\$3,020	
OWEB	17100303	2010	Culvert removal- Rippett Lane, Seaside, OR	Necanicum	\$0	
OWEB	17100303	2010	Brandeau Powell Creek Restoration	Applegate	\$9,720	

OWEB	17100303	2010	Schon-Platz Fencing/Planting Project	Wilson-Trask-Nestucca	\$9,901
OWEB	17100303	2010	Middle Fork Spring and Mule Deer Habitat Restoration Project	Upper Crooked	\$3,572
OWEB	17100303	2010	Cox Creek Habitat Restoration	Umpqua	\$35,450
OWEB	17100303	2010	OWEB 209-2037 Williams Creek Ditch Improvement	Applegate	\$16,400
OWEB	17100303	2010	North Fork Sprague River / Bailey Flat	Sprague	\$94,541
OWEB	17100303	2010	Salo Manure Storage	Lower Columbia	\$7,692
OWEB	17100303	2010	Broken Spur Ranch Watershed Enhancements	Umatilla	\$30,603
OWEB	17100303	2010	Carter Orchard Drip Irrigation	Middle Columbia-Hood	\$10,000
OWEB	17100303	2010	Stinkingwater Habitat Enhancement & Grazing Management	Upper Malheur	\$29,050
OWEB	17100303	2010	Upper Stratton Creek	Upper Rogue	\$0
OWEB	17100303	2010	Bakeoven/Cottonwood Sediment Basins	Lower Deschutes	\$19,109
OWEB	17100303	2010	Sandy River Wild and Scenic Invasive Treatments	Lower Columbia-Sandy	\$92,041
OWEB	17100303	2010	Jones Culvert Replacement Project, Project #04-10-007	Coos	\$10,000
OWEB	17100303	2010	Sjoberg Manure Storage Facility	Upper Willamette	\$6,867
OWEB	17100303	2010	Bates Erosion Control and Water Quality Improvement	South Santiam	\$9,890
OWEB	17100303	2010	Mosby Creek Spring Chinook Re-establishment	Coast Fork Willamette	\$128,650
OWEB	17100303	2010	North Umpqua Gravel Augmentation	North Umpqua	\$31,327
OWEB	17100303	2010	Wallowa Canyonlands Weed Partnership	Imnaha	\$28,000
OWEB	17100303	2010	King Ranch LLC Irrigation Efficiency Project #04-10-009	Coquille	\$10,000
OWEB	17100304	2010	Smith 2011 Irrigation Efficiency Project	Coquille	\$10,000
OWEB	17100304	2010	Horse Spring Canyon Juniper Control	Silvies	\$10,000
OWEB	17100304	2010	McGee Creek In-channel and Floodplain Restoration	Middle Columbia-Hood	\$69,300
OWEB	17100304	2010	MHS Cartwright Creek Riparian Project	McKenzie	\$4,859
OWEB	17100304	2010	Lucky Creek Juniper Removal Project	Upper Crooked	\$8,900
OWEB	17100304	2010	Desolation Creek Culvert	North Fork John Day	\$27,500
OWEB	17100304	2010	Ferry Creek Gravel Augmentation	Coquille	\$7,073
OWEB	17100304	2010	Sauvie Island Pollinator Habitat Project	Lower Willamette	\$6,400
OWEB	17100304	2010	Spring Creek/ Mattoon Road Fish Habitat Restoration Project	Clackamas	\$115,413
OWEB	17100304	2010	Bob Martin Upland Erosion Control	Lower John Day	\$1,882
OWEB	17100304	2010	Dawson Irrigation Mainline	Wallowa	\$92,541

OWEB	17100304	2010	Camp Creek Log Weir Removal Phase I	Middle Fork John Day	\$27,500
OWEB	17100304	2010	Vote Spring Development	North Fork John Day	\$3,297
OWEB	17100304	2010	Galvez West Irrigation Improvement Project	Middle Columbia-Hood	\$10,000
OWEB	17100304	2010	Camp Creek Log Weir Removal Phase II	Middle Fork John Day	\$33,000
OWEB	17100304	2010	Wallowa Canyonlands Weed Partnership	Wallowa	\$4,000
OWEB	17100304	2010	Wallowa Canyonlands Weed Partnership	Lower Grande Ronde	\$18,000
OWEB	17100304	2010	Balch Creek Watershed Restoration Demonstration	Lower Willamette	\$4,275
OWEB	17100304	2010	Upper Kayser Fish Ladder	Lower John Day	\$79,056
OWEB	17100304	2010	Trout Creek Basin Improvements	Alsea	\$121,675
OWEB	17100304	2010	South Fork Beaver Creek Uplands Enhancement Project	Beaver-South Fork	\$524,671
OWEB	17100304	2010	Well Springs Wildlife Water	Middle Columbia-Lake Wallua	\$2,345
OWEB	17100304	2010	Woodtick Watershed Restoration WUI	Burnt	\$204,827
OWEB	17100304	2010	Offsite Livestock Watering McNamee	Trout	\$4,688
OWEB	17100304	2010	West Olalla Passage	Siletz-Yaquina	\$7,630
OWEB	17100304	2010	Upper Middle Fork Allotment Improvements	Middle Fork John Day	\$89,096
OWEB	17100304	2010	Bingham Riparian Fencing and Off-Channel Watering	Upper Grande Ronde	\$47,549
OWEB	17100304	2010	Lincoln County Restoration Planting	Alsea	\$0
OWEB	17100304	2010	Catching Slough Fish Passage Improvement 2011-Northern culvert	Coos	\$32,656
OWEB	17100304	2010	Helping the Pleasant Valley Sage Grouse	Burnt	\$60,900
OWEB	17100304	2010	Kittyhawk Oak Forest Stand Improvement	Middle Willamette	\$10,000
OWEB	17100304	2010	Steamboat Instream Fish Habitat Restoration 2011	North Umpqua	\$30,156
OWEB	17100304	2010	McEwen Valley Fish Passage	Powder	\$108,931
OWEB	17100304	2010	Daniels Creek Riparian Maintenance Project (Saltmarsh)	Coos	\$3,280
OWEB	17100304	2010	West Branch Elk and Alco Creek Habitat Enhancement	Upper Rogue	\$53,240
OWEB	17100304	2010	Pritchard Creek Stream Restoration Project	Burnt	\$10,000
OWEB	17100304	2010	Palouse Creek Riparian Planting & Maintenance Project (Haga)	Coos	\$7,402
OWEB	17100304	2010	Palouse Creek Riparian Maintenance Project (ODF Ranch)	Coos	\$12,039

OWEB	17100304	2010	Larson Creek Riparian Maintenance Project	Coos	\$3,387
OWEB	17100304	2010	Dellwood Logyard & Oxbow Riparian Maintenance Project	Coos	\$6,526
OWEB	17100304	2010	Fredrickson Wetland Planting & Maintenance Project (WRP - Palouse Slough)	Coos	\$1,096
OWEB	17100304	2010	Catching Slough Fish Passage Improvement 2011-Southern culvert	Coos	\$48,984
OWEB	17100304	2010	Brunschmid Wetland Planting Maintenance Project (WRP)	Coos	\$1,963
OWEB	17100304	2010	Fourmile Creek and Harriman Spring Restoration	Upper Klamath Lake	\$83,735
OWEB	17100304	2010	I-84 Riparian Restoration	Powder	\$10,000
OWEB	17100304	2010	Fern Hollows Farm Riparian Maintenance Project (Smith - SF Coos River)	Coos	\$9,416
OWEB	17100304	2010	Fern Hollows Farm Riparian Maintenance & Fish Passage Project (Smith - Rogers Creek)	Coos	\$6,530
OWEB	17100304	2010	Strain Ranch Riparian Maintenance Project (SF Coos River & Rogers Creek)	Coos	\$6,131
OWEB	17100304	2010	Winter Springs Ranch Riparian Maintenance Project (Jaberg - SF Coos River)	Coos	\$3,676
OWEB	17100304	2010	Hendrickson Creek Riparian Maintenance Project (Mahaffy)	Coos	\$2,953
OWEB	17100304	2010	Packard Creek Riparian Maintenance Project (Mahaffy)	Coos	\$4,709
OWEB	17100304	2010	Allegany Logyard Riparian Maintenance Project (Millicoma River)	Coos	\$9,537
OWEB	17100304	2010	Rock Creek Aspen Restoration	Lower Grande Ronde	\$36,150
OWEB	17100304	2010	Ramsey/Rock Creek Riparian	Lower John Day	\$94,950
OWEB	17100304	2010	East Lents Restoration Project	Lower Willamette	\$0
OWEB	17100304	2010	TSID Main Canal Water Conservation Project Phases 1&2	Upper Deschutes	\$985,353
OWEB	17100304	2010	Miami Wetland Enhancement Project	Wilson-Trask-Nestucca	\$450,648
OWEB	17100304	2010	South Santiam McDowell Creek Instream (SIP)	South Santiam	\$90,905
OWEB	17100304	2010	Duncan Ditch Water Quality Protection Project	Powder	\$53,006
OWEB	17100304	2010	Sodom Dam Removal	Middle Willamette	\$1,036,803
OWEB	17100304	2010	Paasch Drive Manure Storage Facility	Middle Columbia-Hood	\$10,000
OWEB	17100304	2010	OWEB Grant #209-3007 - Delta Ponds Habitat Restoration	Upper Willamette	\$204,368

OWEB	17100304	2010	Zumwalt Prairie Preserve Riparian Restoration	Imnaha	\$230,801
OWEB	17100304	2010	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Raindance	Upper Willamette	\$30,559
OWEB	17100304	2010	Crystal Springs Restoration and 28th Ave culvert replacement at Reed College	Lower Willamette	\$142,520
OWEB	17100304	2010	Camp Creek Riparian and Spring Restoration Project	Upper Crooked	\$9,300
OWEB	17100305	2010	Seeley Creek Habitat Restoration	Umpqua	\$7,750
OWEB	17100305	2010	Brown Aspen Recovery Project	Upper Crooked	\$2,622
OWEB	17100305	2010	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Dunn	Upper Willamette	\$25,000
OWEB	17100305	2010	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Marys	Upper Willamette	\$35,000
OWEB	17100305	2010	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Wintercreek	Upper Willamette	\$20,000
OWEB	17100305	2010	WREP II: Habitat and Stewardship for Willamette Valley Endangered Species, Mudslough	Middle Willamette	\$15,000
OWEB	17100305	2010	Scott Fuels Treatment & Forest Restoration	Wallowa	\$8,040
OWEB	17100305	2010	Horseshoe Ranch - Wood River Restoration	Upper Klamath Lake	\$20,952
OWEB	17100305	2010	North Santiam Instream-SIP	North Santiam	\$98,688
OWEB	17100305	2010	Ojalla Creek Instream Habitat Restoration	Siletz-Yaquina	\$24,940
OWEB	17100305	2010	Little Beech Creek Watershed Restoration	Upper John Day	\$21,965
OWEB	17100305	2010	Carpenter Ants	Siuslaw	\$0
OWEB	17100305	2010	Dump Tower	Upper Willamette	\$0
OWEB	17100305	2010	Oregon 150- Jefferson Farm Upland Prairie Restoration	North Santiam	\$30,726
OWEB	17100305	2010	Fergie's Rise	Upper Willamette	\$0
OWEB	17100305	2010	Upper Rock Cr 16	Coquille	\$0
OWEB	17100305	2010	Upper Rock Creek 19-11 Unit 1	Coquille	\$0
OWEB	17100305	2010	Red Sugar 2	Sixes	\$0
OWEB	17100305	2010	Elkton 41 #2	Umpqua	\$0
OWEB	17100305	2010	Red Rock Super 35, Unit 1 & Unit 2	Sixes	\$0
OWEB	17100305	2010	Rusty Slide 15	Sixes	\$0

OWEB	17100305	2010	Headrick Corner	Alsea	\$0
OWEB	17100305	2010	Honey Head	Alsea	\$0
OWEB	17100305	2010	Poked Again	Alsea	\$0
OWEB	17100305	2010	Honey Comb	Alsea	\$0
OWEB	17100305	2010	Honey Dew	Alsea	\$0
OWEB	17100305	2010	Lutefisk	Upper Willamette	\$0
OWEB	17100306	2010	Kay Young: Working Towards a Fish Friendly Future	Powder	\$288,705
OWEB	17100306	2010	Lonerock Creek Juniper Removal Phase II	Lower John Day	\$4,930
OWEB	17100306	2010	Kennedy-Murray phase I/Clausen Pump Station	Upper John Day	\$21,335
OWEB	17100306	2010	Parsons Gradient Terraces	Upper Grande Ronde	\$10,000
OWEB	17100306	2010	Sevenmile Creek Passage	Upper Klamath Lake	\$16,781
OWEB	17100306	2010	NARA NW Native Plant Restoration	Lower Willamette	\$3,859
OWEB	17100306	2010	Radloff Property Restoration Project	Tualatin	\$10,000
OWEB	17100306	2010	Multnomah Channel Habitat Connection	Upper Willamette	\$5,626
OWEB	17100306	2010	Downing Irrigation Delivery Improvement Project	Lower Crooked	\$9,500
OWEB	17100306	2010	Monson Bridges I	Coos	\$29,881
OWEB	17100306	2010	Elk Flats Restoration 210-1023	Necanicum	\$65,145
OWEB	17100306	2010	Carter Creek Restoration Project	Tualatin	\$9,725
OWEB	17100306	2010	Elmwood Neighborhood Restoration Project	Tualatin	\$5,486
OWEB	17100306	2010	Monson Bridges II	Coos	\$29,881
OWEB	17100306	2010	Anderson's Lonerock Creek Juniper Removal, Phase II	Lower John Day	\$3,775
OWEB	17100306	2010	Swanson Sediment Abatement II	Coos	\$127,314
OWEB	17100306	2010	West Camp Creek Push-up Dam Removal	Burnt	\$73,830
OWEB	17100306	2010	West Fork Trib Fish Passage Improvement	Coos	\$27,803
OWEB	17100306	2010	Frasch Fuels Treatment & Forest Restoration	Wallowa	\$8,040
OWEB	17100306	2010	Redland Road Fish Passage Improvement	Clackamas	\$57,810
OWEB	17100306	2010	Foothill Return Flow Elimination and Drain Ditch Restoration	Lower Malheur	\$59,958
OWEB	17100306	2010	Jordan Valley Weed Restoration Phase II	Middle Snake-Succor	\$4,925
OWEB	17100306	2010	Jordan Valley Weed Restoration Phase II	Jordan	\$26,100
OWEB	17100306	2010	Jordan Valley Weed Restoration Phase II	Middle Owyhee	\$225



OWEB	17100306	2010	Jordan Valley Weed Restoration Phase II	Crooked-Rattlesnake	\$18,876
OWEB	17100306	2010	Jordan Valley Weed Restoration Phase II	Upper Quinn	\$28,924
OWEB	17100306	2010	Piledriver Creek Fish Passage Improvement	Coos	\$23,747
OWEB	17100306	2010	Tributary B Stream Crossing Removal	Coos	\$0
OWEB	17100306	2010	Lindley-Sheehy	Upper Grande Ronde	\$105,255
OWEB	17100306	2010	West Fork Smith River Instream Restoration	Umpqua	\$132,648
OWEB	17100307	2010	Lincoln County Knotweed Control Project	^Alsea, Siletz-Yaquina	\$0
OWEB	17100307	2010	Pixieland Phase I - Restoration	Siletz-Yaquina	\$194,179
OWEB	17100307	2010	Omeg Orchards Oregon Swallowtail Plantings	Middle Columbia-Hood	\$15,003
OWEB	17100307	2010	Cole-Engle Fish Passage and Irrigation Improvement	North Fork John Day	\$84,838
OWEB	17100307	2010	Olalla-Lookingglass Instream Restoration	South Umpqua	\$78,861
OWEB	17100307	2010	Haynes Way Fish Passage Improvement- Site1	Coos	\$26,773
OWEB	17100307	2010	Haynes Way Fish Passage Improvements- Site 2	Coos	\$13,186
OWEB	17100307	2010	McCullough Spring Development Phase I	North Fork John Day	\$6,098
OWEB	17100308	2010	Prineville Reservoir Southern Watersheds Restoration Project	Upper Crooked	\$326,260
OWEB	17100308	2010	Mill Creek Habitat and Floodplain Restoration Project	Lower Crooked	\$46,893
OWEB	17100308	2010	Kimberly Creek Channel Reconstruction/Pugh	Siltcoos	\$9,016
OWEB	17100308	2010	Thompson Creek Upland Improvement	Lower John Day	\$30,117
OWEB	17100308	2010	White Creek Reconstruction & Rocking	North Umpqua	\$0
OWEB	17100308	2010	Union Log Road Reconstruction & Rocking	South Umpqua	\$0
OWEB	17100308	2010	Cavitt 640 NE Reconstruction	North Umpqua	\$0
OWEB	17100308	2010	Lampson Levee Setback and Habitat Restoration Project	Walla Walla	\$97,985
OWEB	17100308	2010	Arnold Irrigation District Vegetation Management	Lower Deschutes	\$10,000
OWEB	17100308	2010	Borge Water Quality Improvement	Lower Owyhee	\$22,357
OWEB	17100308	2010	Windbreak & Wildlife Habitat	Lower Grande Ronde	\$3,927
OWEB	17100308	2010	Little Muddy Creek Range & Habitat Restoration	Upper Malheur	\$124,596
OWEB	17100308	2010	Hardscrabble and Jack Creeks Fish Passage Restoration	Umpqua	\$59,210
OWEB	17100308	2010	South Fork Simpson Bridges	Middle Fork Willamette	\$0
OWEB	17100308	2010	Little Camel Rocking	Umpqua	\$0
OWEB	17100308	2010	Middle Jackson Creek Restoration	South Umpqua	\$151,250

OWEB	17100308	2010	Evarts Road Reconstruction	North Umpqua	\$0
OWEB	17100308	2010	West Fork Williams Creek Stream Restoration	Applegate	\$16,500
OWEB	17100308	2010	Engdahl Wetland and Stream Enhancement Project	Middle Fork Willamette	\$9,987
OWEB	17100308	2010	Nelson Creek Riparian Restoration Project	Middle Fork Willamette	\$31,443
OWEB	17100308	2010	Five Creeks-Steens Mountain Ranch Restoration Project	Harney-Malheur Lakes	\$70,486
OWEB	17100308	2010	Gossage Creek CMP (Fish Pipe)	Middle Fork Willamette	\$0
OWEB	17100308	2010	Fall Creek log stringer bridge removal	Clackamas	\$0
OWEB	17100308	2010	Walker Crk fill and culvert removal	Lower Columbia-Sandy	\$0
OWEB	17100309	2010	Gates Scale sediment trap and cross-drain	North Santiam	\$0
OWEB	17100309	2010	630 Road/170 Road Connector - 2011	Siletz-Yaquina	\$0
OWEB	17100309	2010	Winter Green Farm Pond Enhancement & Invasive Species Control	Upper Willamette	\$17,428
OWEB	17100309	2010	Livestock Water Source Cleanup	Willow	\$1,420
OWEB	17100309	2010	Crooked Creek Bridge	Yamhill	\$0
OWEB	17100309	2010	AW Conversion to Sprinkler Irrigation	Willow	\$1,579
OWEB	17100310	2010	JW Conversion to Pivot Irrigation	Willow	\$5,477
OWEB	17100310	2010	Lissman Livestock Waste Water Elimination	Willow	\$2,773
OWEB	17100310	2010	Lone Tree Underground Pipe Project	Willow	\$10,000
OWEB	17100310	2010	Beaverdam 6.5 mile Fish Pipe	Wilson-Trask-Nestucca	\$0
OWEB	17100310	2010	South Lousignont Culvert and Fill Removal	Nehalem	\$0
OWEB	17100310	2010	Pisgah Culvert	Lower Willamette	\$0
OWEB	17100310	2010	Long Cougar Timber Sale #341-10-62	Coos	\$0
OWEB	17100310	2010	NE0962, Jack Creek Salmon Enhancement	Siletz-Yaquina	\$0
OWEB	17100310	2010	NE1068, Yachats Downhill	Alsea	\$0
OWEB	17100310	2010	Shortsands ML Bridge	Nehalem	\$0
OWEB	17100310	2010	Shortsands ML Culvert	Nehalem	\$0
OWEB	17100310	2010	Witcher Creek Culverts	Tualatin	\$0
OWEB	17100311	2010	Lost Creek Culvert	Lower Columbia	\$0
OWEB	17100311	2010	Hammond Road Culverts	Lower Columbia	\$0
OWEB	17100312	2010	Janshaw Culverts	Lower Columbia-	\$0

				Clatskanie	
OWEB	17100312	2010	Vannatta Rocking	Lower Columbia-Clatskanie	\$0
OWEB	17120001	2010	Reindeer Culverts	Lower Columbia	\$0
OWEB	17120001	2010	Trenholm Culverts	Lower Willamette	\$0
OWEB	17120001	2010	Lake Creek Forest Restoration	Silvies	\$9,534
OWEB	17120001	2010	Beals Mouth	South Umpqua	\$0
OWEB	17120002	2010	After Last	South Umpqua	\$0
OWEB	17120002	2010	Johns Lavadoure	South Umpqua	\$0
OWEB	17120002	2010	Jessica Beals	South Umpqua	\$0
OWEB	17120002	2010	Shively 16	South Umpqua	\$0
OWEB	17120002	2010	Condi Rice	South Umpqua	\$0
OWEB	17120002	2010	Mule Skinner	Coquille	\$0
OWEB	17120004	2010	Lee Forty	South Umpqua	\$0
OWEB	17120004	2010	Munster Mash	Coquille	\$0
OWEB	17120005	2010	Camp Olson Bridge	Nehalem	\$0
OWEB	17120005	2010	Camp Olson Culvert	Nehalem	\$0
OWEB	17120005	2010	Munny Matters	Coquille	\$0
OWEB	17120005	2010	Shoup Bones	North Umpqua	\$0
OWEB	17120005	2010	Rock Creek Jct	North Umpqua	\$0
OWEB	17120005	2010	Slate Roof	Coquille	\$0
OWEB	17120009	2010	Little Salander Timber Sale 341-08-35	Umpqua	\$0
OWEB	17120009	2010	Gable Creek Irrigation Efficiency/Fish Passage	Lower John Day	\$70,293
OWEB	18010201	2010	Joe Knife Timber Sale No. 341-07-48	Coos	\$0
OWEB	18010202	2010	South Meadow Floodplain Enhancement Phase III (OWEB Grant #208-3090)	Upper Willamette	\$204,823
OWEB	18010202	2010	Loose Shoes: Timber Sale # 341-11-22	Coos	\$0
OWEB	18010202	2010	South Marlow Switch: Timber Sale # 341-09-27	Coos	\$0
OWEB	18010202	2010	Wendling 15034	McKenzie	\$0
OWEB	18010202	2010	Kenstone Quarry Fish Passage	Coos	\$0

OWEB	18010202	2010	7101 Crossing	Coos	\$0
OWEB	18010202	2010	3590 Crossing	Umpqua	\$0
OWEB	18010202	2010	Quarry Tie	McKenzie	\$0
OWEB	18010202	2010	Gate Cr. 60	McKenzie	\$0
OWEB	18010202	2010	Mohawk 2000C	McKenzie	\$0
OWEB	18010202	2010	Gate Cr. 113 / 114	McKenzie	\$0
OWEB	18010203	2010	Camp Cr. 570	McKenzie	\$0
OWEB	18010203	2010	Gate Cr. Mainline	McKenzie	\$0
OWEB	18010203	2010	Mohawk 2400 / 2446	Upper Willamette	\$0
OWEB	18010203	2010	McGowan 140	McKenzie	\$0
OWEB	18010203	2010	Drury Cr. 400	McKenzie	\$0
OWEB	18010203	2010	West Potts Cr.	Upper Willamette	\$0
OWEB	18010203	2010	Mohawk 2400A	Upper Willamette	\$0
OWEB	18010204	2010	Calapooia 3700	Upper Willamette	\$0
OWEB	18010204	2010	Calapooia 3000 / 3020	Upper Willamette	\$0
OWEB	18010204	2010	GM 1300 WRMI	South Santiam	\$0
OWEB	18010204	2010	Calapooia 3190	Upper Willamette	\$0
OWEB	18010204	2010	Gate Cr. 113	McKenzie	\$0
OWEB	18010204	2010	BK 600	McKenzie	\$0
OWEB	18010204	2010	BK 764	McKenzie	\$0
OWEB	18010204	2010	BK 766A/770	Middle Fork Willamette	\$0
OWEB	18010204	2010	Greenhouse 20	McKenzie	\$0
OWEB	18010204	2010	LFC 160	Middle Willamette	\$0
OWEB	18010204	2010	Trout Cr. M/L	McKenzie	\$0
OWEB	18020001	2010	BK 421 / Greenhouse Tie	McKenzie	\$0
OWEB	18020001	2010	LFC 7046	Middle Fork Willamette	\$0
OWEB	18020001	2010	LFC 7320 Pit	Middle Fork Willamette	\$0
OWEB	18020001	2010	LFC 7100	Middle Fork Willamette	\$0
OWEB	18020001	2010	Gales 600	McKenzie	\$0
OWEB	18020001	2010	LFC 530	Middle Fork Willamette	\$0

OWEB	18020001	2010	LFC 7040A	Middle Fork Willamette	\$0
OWEB	18020001	2010	LFC 6000/6100	Middle Fork Willamette	\$0
OWEB	171002020	2010	LFC 6100	Middle Fork Willamette	\$0
OWEB	171002030	2010	LFC 136	Middle Fork Willamette	\$0
OWEB	#####	2010	BK 700	Middle Fork Willamette	\$0
OWEB	#####	2010	Deer Cr 4000/6000	Middle Fork Willamette	\$0
OWEB	#####	2010	LFC 500	McKenzie	\$0
OWEB	#####	2010	LFC 800	McKenzie	\$0
OWEB	#####	2010	BK 961	McKenzie	\$0
OWEB	#####	2010	TC 11000/12100	McKenzie	\$0
OWEB	#####	2010	Anderson Creek Grade Bridge	Nehalem	\$0
OWEB	170501031103, 0704-06, 150101	2010	LFC 500/Deer Creek 6000	McKenzie	\$0
OWEB	170501100701 - 06	2010	Booth Kelly 400 Road Repair	McKenzie	\$0
OWEB	170601040501 - 07	2010	Calapooia 3033/3034/3035 Road Repair	Upper Willamette	\$0
OWEB	170701030203, 05, 06	2010	Calapooia 3030 Road Repair	Upper Willamette	\$0
OWEB	170900030101 - 10, 0201-05	2010	Booth Kelly M/L Pipe Replacement	McKenzie	\$0
OWEB	171002020503	2010	Camp Ck 700 Pipe Replacement	McKenzie	\$0
OWEB	171002030101, 02, 0903	2010	North Fork Sprague River Fish Passage	Sprague	\$161,155
OWEB	171002040102, 0501, 0701	2010	1000 Road East Pipe	Siletz-Yaquina	\$0
OWEB	171003021205	2010	1000 Road West Pipe	Siletz-Yaquina	\$0
OWEB	171003050201, 03, 05, 07, 08	2010	1000 Road West Pipe	Siletz-Yaquina	\$0
OWEB	171003080105, 07, 09, 10, 12	2010	Kelty Loop Pipe	Siletz-Yaquina	\$0
OWEB	171003090303	2010	Schooner Creek Dam Removal	Siletz-Yaquina	\$0
OWEB	Area wide	2010	Lost Name Fill Removals	Siletz-Yaquina	\$0

OWEB	Area wide	2010	700 Road Decommissioning	Siletz-Yaquina	\$0
OWEB	Area wide	2010	Meat Loaf North Reconstruction	Siletz-Yaquina	\$0
OWEB	Clackamas (17090011)	2010	Giustina ML Log Fill Replacements	McKenzie	\$0
OWEB	Clackamas (17090011)	2010	Bear Creek Bypass & Fish Pipes	Coast Fork Willamette	\$0
OWEB	Lower Columbia- Clatskanie (17080003)	2010	Middle Fork Willamette Bull Trout Restoration	Middle Fork Willamette	\$213,704
DW SRF Grant	Lower Crooked (17070305)	2012	City of Dallas - Enhanced assessment and protection planning		\$50,000
DW SRF Grant	Middle Columbia- Lake Wallula (17070101)	2012	South Fork Water Board and Clackamas River Water Providers (6PWSs) - GIS assessment and risk evaluation		\$30,000
DW SRF Grant	Middle Willamette (17090007) or Rickreall Creek- Willamette River (1709000701)	2012	Cities of Lowell, Cottage Grove, Salem and Springfield - Evaluation of HABs and cyanobacteria risks at Dexter, Dorena and Detroit Reservoirs		\$30,000
DW SRF Grant	North Santiam (17090005) and Middle Fork Willamette (17090001)	2012	Toledo Water Utility and City of Newport - Turbidity- sediment monitoring and streambank erosion and roads assessment		\$120,000
DW SRF Grant	Siletz-Yaquina (17100204)	2012	Columbia City Municipal Water Works - Enhanced delineation and risk assessment		\$54,079
DW SRF Grant	Statewide	2012	Bend Water Department - Upgrade inventory of risks and GIS		\$28,655
DW SRF Grant	To be determined	2012	South Fork Water Board and Clackamas River Water Providers (6PWSs) - Septic system workshops and pharmaceutical collection		\$30,000
DW SRF Grant	Upper Deschutes (17070301)	2012	City of Prineville - Enhanced delineation		\$50,000

DW SRF Grant		2012	City of Irrigon - Enhanced assessment, protection planning and implementation		\$30,000
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## Appendix 1. Progress of NPS 319 Funded Projects (Grant Performance Report)

Table 8. Progress of NPS 319 Funded Projects (Grant Performance Report).

PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W07700	Little North Fork, Nehalem Riparian Enhancement	2007	NWR	Lower Nehalem Watershed Council	\$7,840.29	\$7,840.29	\$0.00	CLOSED	Apple, Bruce	31-Dec-08
W07701	Powder River WQ Enhancement Project	2007	ER	Baker Valley Soil & Water Conservation District	\$52,500.00	\$52,500.00	\$0.00	CLOSED	Dombrowski, Tonya	31-Dec-08
W07702	Wolfe Creek Enhancement Project	2007	NWR	Tillamook County Estuary Partnership	\$18,024.50	\$18,024.50	\$0.00	CLOSED	Apple, Bruce	31-Dec-08
W07703	Scholfield Creek Riparian Enhancement	2007	WR	Umpqua SWCD	\$15,984.00	\$15,984.00	\$0.00	CLOSED	Tugaw, Heather	31-Dec-09
W07704	Circle Creek Enhancement Project	2007	NWR	North Coast Land Conservancy	\$27,503.60	\$27,503.60	\$0.00	CLOSED	Apple, Bruce	30-Oct-09
W07705	2008 Tillamook Co. Children's Water Fest	2007	NWR	Tillamook County Estuary Partnership	\$4,617.00	\$4,617.00	\$0.00	CLOSED	Apple, Bruce	31-Aug-08
W07706	Backyard Planting Program - Year 5	2007	NWR	Tillamook County Estuary Partnership	\$49,449.94	\$49,449.94	\$0.00	CLOSED	Apple, Bruce	31-Dec-08
W07707	Cedar Island Demonstration Restoration Project	2007	NWR	Willamette Riverkeeper	\$4,622.25	\$4,622.25	\$0.00	CLOSED	Newell, Avis	31-Dec-09
W07708	Upper Nehalem Riparian Restoration And B	2007	NWR	Upper Nehalem Watershed Council	\$54,360.00	\$54,360.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-08
W07709	Multnomah Co. Central Library Eco-Roof	2007	NWR	Multnomah County	\$102,148.00	\$102,148.00	\$0.00	CLOSED	Apple, Bruce	30-Jun-09
W07710	Applegate WS TMDL Implementation	2007	WR	Applegate River Watershed Council	\$112,514.00	\$112,514.00	\$0.00	CLOSED	Tugaw, Heather	31-Dec-11
W07711	Owyhee River Improvement Project	2007	ER	Malheur SWCD	\$37,196.03	\$37,196.03	\$0.00	CLOSED	Dombrowski, Tonya	30-Jun-10
W07712	Choir Boys Construct Wetland Project	2007	ER	Malheur SWCD	\$52,248.00	\$52,248.00	\$0.00	CLOSED	Dombrowski, Tonya	30-Sep-09
W07713	Middle Fork Of The John Day River Aquatic	2007	ER	Nature Conservancy	\$119,214.00	\$119,214.00	\$0.00	CLOSED	Dombrowski, Tonya	31-Mar-11
W07715	Tillamook SWCD 2007 Stream Enhancement	2007	NWR	Tillamook County SWCD	\$42,984.81	\$42,984.81	\$0.00	CLOSED	Apple, Bruce	30-Jun-10
W07716	2007-08 NNWC Streamside Planting And Maint.	2007	NWR	Nestucca Neskowin Watershed Council	\$60,000.00	\$60,000.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-08
W07717	Medford Sports & Community Park Urban Renewal	2007	WR	City of Medford	\$23,493.45	\$23,493.45	\$0.00	CLOSED	Tugaw, Heather	31-Dec-09
W07718	Restoration Effect. Monit. In Priority B	2007	ER	Upper Deschutes Watershed	\$80,012.94	\$80,012.94	\$0.00	CLOSED	Lamb, Bonnie	30-Apr-10
W07719	Private Well Outreach And Monitoring	2007	WR	Oregon State University	\$53,503.00	\$53,503.00	\$0.00	CLOSED	Eldridge, Audrey	30-Aug-08

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Commented [A6]: Good to have this data, would have been nice if you could have done something with the data other than putting in a table.

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PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W07720	Calapooia & Santiam Landowner Outreach	2007	WR	South Santiam Watershed Council	\$73,581.06	\$73,581.06	\$0.00	CLOSED	Gramlich, Nancy	31-Aug-09
W07721	Mckenzie River Septic System Assistance	2007	WR	Eugene Water & Electric Board	\$68,000.00	\$68,000.00	\$0.00	CLOSED	Tugaw Heather	30-Jun-09
W07722	Integration TMDL And GW Priorities Into	2007	WR	Benton Soil & Water Conservation District	\$167,788.88	\$167,788.88	\$0.00	CLOSED	Eldridge, Audrey	30-Nov-10
W07723	WQ Investment: Streamside Restoration	2007	NWR	Metro	\$83,362.95	\$83,362.95	\$0.00	CLOSED	Apple, Bruce	30-Nov-09
W08700	Meachem Ck. Restoration Bioassessment	2008	ER	Oregon State University	\$44,034.00	\$44,034.00	\$0.00	CLOSED	Dombrowski, Tonya	30-Jan-11
W08702	Whychus Creek Restoration at Camp Polk	2008	ER	Upper Deschutes Watershed Council	\$175,150.99	\$175,150.99	\$0.00	CLOSED	Lamb, Bonnie	30-Apr-11
W08703	Ochoco Ck Stream Enh. and Greenway Expansion	2008	ER	Crooked River Watershed Council	\$77,316.00	\$77,316.00	\$0.00	CLOSED	Lamb, Bonnie	30-Jun-10
W08705	Nestucca Neskowin Streamside Plant./Maint.	2008	NWR	Nestucca Neskowin Watershed Council	\$60,000.00	\$60,000.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-09
W08706	Agriculture & Rural Residential Planting	2008	NWR	Tillamook County Estuary Partnership	\$48,473.47	\$48,473.47	\$0.00	CLOSED	Apple, Bruce	31-Dec-09
W08707	CCWF 2009	2008	NWR	Tillamook County Estuary Partnership	\$5,000.00	\$5,000.00	\$0.00	CLOSED	Apple, Bruce	31-Aug-09
W08708	Gresham NPS Red. Prog. Stream Outreach/Rest.	2008	NWR	City of Gresham	\$58,315.31	\$58,315.31	\$0.00	CLOSED	Apple, Bruce	30-Jun-10
W08709	Up. Nehalem Rip. Rest & Basin WQ Monitoring	2008	NWR	Upper Nehalem Watershed Council	\$53,785.71	\$53,785.71	\$0.00	CLOSED	Apple, Bruce	31-Dec-09
W08710	Riparian & Wetland Restoration	2008	NWR	Columbia SWCD	\$43,112.68	\$43,112.68	\$0.00	CLOSED	Apple, Bruce	30-Apr-10
W08711	Dry Manure Storage Initiative	2008	NWR	Clatsop Soil & Water Conservation District	\$23,660.00	\$23,660.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-09
W08712	Rinearson Creek Project	2008	NWR	Willamette Riverkeeper	\$21,414.98	\$21,414.98	\$0.00	CLOSED	Apple, Bruce	30-Jun-10
W08713	N. Willamette Chemical Waste Collection	2008	WR	Marion County SWCD	\$19,469.82	\$19,469.82	\$0.00	CLOSED	Apple, Bruce	31-Dec-09
W08714	Siltcoos L. WQ and Macro data acquisition for TMDL	2008	WR	Portland State University	\$84,983.61	\$84,983.61	\$0.00	CLOSED	Waltz, David	31-Oct-09
W08715	Pringle Creek Riparian Pilot Project	2008	WR	City of Salem	\$3,401.60	\$3,401.60	\$0.00	CLOSED	Gramlich, Nancy	30-Sep-10
W08716	Southern Willamette Valley GWMA Action Plan/Imp	2008	WR	Lane Council of Governments	\$99,893.00	\$99,893.00	\$0.00	CLOSED	Eldridge, Audrey	30-Nov-10
W08717	Mid-Coast Sediment Ass. & Source Ctrl Prg.	2008	WR	Siuslaw Watershed Council	\$64,412.37	\$64,412.37	\$0.00	CLOSED	David Waltz	31-Dec-09
W08718	Upper Willamette WQ Monitoring & Outreach Pgm	2008	WR	Middle Fork Willamette Watershed Council	\$107,791.00	\$107,791.00	\$0.00	CLOSED	Wright, Pamela	31-Mar-11

PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W08719	PUR Water Quality Monitoring	2008	WR	Partnership for Umpqua Rivers	\$32,092.12	\$32,092.12	\$0.00	CLOSED	Tugaw, Heather	31-Dec-10
W08720	Ten mile Lakes WQ Impl. Plan Phase II	2008	WR	City of Lakeside	\$109,725.00	\$109,725.00	\$0.00	CLOSED	Blake, Pamela	30-Jun-11
W08721	Bear Ck WS WQIP Dev. & TMDL Implementation	2008	WR	Rogue Valley Council of Governments	\$49,407.41	\$49,407.41	\$0.00	CLOSED	Tugaw, Heather	31-Dec-09
W08722	Strip Tillage Agreement (#036-10) for OSU Ext	2008	ER	Oregon State University	\$0.00	\$ -----	\$0.00	CLOSED	Dombrowski, Tonya	28-Feb-11
W09700	WQ and effect monitoring in the Crooked R. WS	2009	ER	Crooked River Watershed Council	\$63,488.44	\$63,488.44	\$16,511.56	OPEN	Dombrowski, Tonya	28-Feb-13
W09702	Alkali Creek Water Quality Enhancement	2009	ER	Malheur SWCD	\$31,500.00	\$31,500.00	\$3,500.00	OPEN	Dombrowski, Tonya	31-Dec-12
W09703	Strip Tillage in Malheur & Owyhee Watersheds	2009	ER	Oregon State University	\$79,454.76	\$79,454.76	\$0.00	CLOSED	Dombrowski, Tonya	01-Feb-11
W09704	Owyhee River Improve. Project - Phase 2	2009	ER	Malheur SWCD	\$23,543.70	\$23,543.70	\$11,456.30	OPEN	Dombrowski, Tonya	31-Dec-12
W09705	City of Prineville Stormwater Pollution Reduction	2009	ER	City of Prineville	\$70,000.00	\$70,000.00	\$0.00	CLOSED	Dombrowski, Tonya	31-Jul-11
W09706	LUBGWMA Action Plan Effect Monitorng & Outreach	2009	ER	Umatilla County SWCD	\$38,000.00	\$38,000.00	\$0.00	CLOSED	Richerson, Phil	30-Apr-11
W09707	Apple Sunburn Prevention Using Organic Biofilm	2009	ER	Oregon State University	\$93,435.00	\$93,435.00	\$0.00	CLOSED	Dombrowski, Tonya	31-Jul-11
W09708	Clackamas Planting Outreach Project	2009	NWR	Clackamas River Basin Council	\$59,378.00	\$59,378.00	\$0.00	CLOSED	Newell, Avis	31-Dec-11
W09709	2009-10 NNWC Streamside Planting & Maintenance	2009	NWR	Nestucca Neskowin Watershed Council	\$60,000.00	\$60,000.00	\$0.00	CLOSED	Apple, Bruce	31-Mar-11
W09710	North Coast Watersheds Enhancement Project	2009	NWR	C.R.E.S.T.	\$28,812.22	\$28,812.22	\$0.00	CLOSED	Apple, Bruce	31-Aug-11
W09711	Pilot Scale SW Master Planning w/EcoSys Approach	2009	NWR	City of Damascus	\$38,020.97	\$38,020.97	\$0.00	CLOSED	Apple, Bruce	28-Feb-11
W09712	Up Nehalem Riparian Restoration & Basin WQ Monitor	2009	NWR	Upper Nehalem Watershed Council	\$84,652.00	\$84,652.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-10
W09713	Circle Creek Enhancement Project Phase Three	2009	NWR	North Coast Land Conservancy	\$30,494.03	\$30,494.03	\$0.00	CLOSED	Apple, Bruce	31-Dec-10
W09714	Scappoose Creek Riparian Restoration	2009	NWR	Scappoose Bay Watershed Council	\$20,416.15	\$20,416.15	\$0.00	CLOSED	Apple, Bruce	30-Apr-11
W09715	2010 Tillamook Co Children Clean Water Festival	2009	NWR	Tillamook County Estuary Partnership	\$5,000.00	\$5,000.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-10
W09716	BYPP Year 7	2009	NWR	Tillamook County Estuary Partnership	\$60,000.00	\$60,000.00	\$0.00	CLOSED	Apple, Bruce	31-Mar-11
W09717	Tillamook SWCD 2007 Stream Enhance & Restoration	2009	NWR	Tillamook County SWCD	\$10,760.69	\$10,760.69	\$29,239.31	OPEN	Apple, Bruce	30-Jun-12

PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W09718	Devil's lake and D River WQ	2009	WR	Devils Lake Water Improvement District	\$14,480.00	\$14,480.00	\$0.00	CLOSED	Waltz, David	31-Mar-11
W09719	Coquille North Fork Drinking Water Source Protection	2009	WR	Coquille Watershed Association	\$6,327.17	\$6,327.17	\$8,918.83	OPEN	Blake, Pamela	31-Mar-12
W09720	Targeted WQ Outreach to Isthmus & Coalbank Sloughs	2009	WR	Coos Watershed Association	\$20,608.00	\$20,608.00	\$0.00	CLOSED	Blake, Pamela	30-Nov-11
W09721	Low-Impact Dev. Workshops & Tech Assis Year 2	2009	WR	Oregon Environmental Council	\$17,174.68	\$17,174.68	\$0.00	CLOSED	Blake, Pamela	15-Dec-10
W09722	Sucker/Kelly Creeks Comm. Ed. Outreach	2009	WR	Forestry Action Committee	\$4,444.16	\$4,444.16	\$0.00	CLOSED	Tugaw, Heather	31-Dec-11
W09723	Coordinated Rogue B WQ Implementation Plan Dev	2009	WR	Rogue Valley Council of Governments	\$41,764.15	\$41,764.15	\$4,004.85	OPEN	Tugaw, Heather	31-Dec-11
W09724	Little Butte Creek WQ Enhancement Project	2009	WR	Jackson County SWCD	\$20,000.00	\$20,000.00	\$0.00	CLOSED	Tugaw, Heather	30-Jun-11
W09725	Santiam-Calapooia Landowner Recruitment & Restoration	2009	WR	South Santiam Watershed Council	\$79,868.00	\$79,868.00	\$0.00	CLOSED	Gramlich, Nancy	30-Sep-11
W09726	School Resto program: restora, design and SW Mgmnt	2009	WR	Camas Education Network	\$18,041.26	\$18,041.26	\$1,958.74	OPEN	Bayham, Chris	30-Mar-12
W09727	Impl. Monit. Of Umpqua Basin, Diamond Lake TMDL	2009	WR	Partnership for Umpqua Rivers	\$35,500.00	\$35,500.00	\$0.00	CLOSED	Tugaw, Heather	31-Dec-11
W09728	PUR Water Quality Monitoring & Thermal Refugia Inv	2009	WR	Partnership for Umpqua Rivers	\$22,663.83	\$22,663.83	\$9,761.17	OPEN	Tugaw, Heather	31-Mar-12
W09729	GW Protection Ed. To promote citizen involvement	2009	WR	Oregon State University	\$67,442.93	\$67,442.93	\$0.00	CLOSED	Eldridge, Audrey	30-Jun-11
W09730	Mid Coast Basin NPS Implementation Initiative	2009	WR	Lincoln SWCD	\$75,581.00	\$75,581.00	\$0.00	CLOSED	David Waltz	30-Sep-10
W09731	Streambank - Willamette Basin Riparian Restoration	2009	Cross Region	Freshwater Trust	\$51,500.00	\$51,500.00	\$8,500.00	OPEN	Michie, Ryan	30-Sep-12
W09732	Pesticide Stewardship Partnership	2009	Cross Region	Wasco County SWCD	\$36,921.89	\$308,764.52	(\$75,064.52)	OPEN	Kishida, Koto	30-Sep-11
W09733	KOIN WQ Campaign	2009	NWR		\$8,334.00	\$8,334.00	\$0.00	CLOSED	Danab, Marcia	
W10701	Oregon P3 List into Prominent Product Ranking Tool	2010	Cross Region	Association of Clean Water Agencies, Oregon	\$8,506.34	\$8,506.34	\$2,550.66	OPEN	Camacho, Ivan	31-May-11
W10702	ODF RipStream Vegetation Survey	2010	Cross Region	OR Dept of Forestry	\$43,958.97	\$43,958.97	\$39,041.03	OPEN	Seeds, Joshua	30-Jun-12
W10703	Strip Tillage in Malheur & Owyhee watersheds -2	2010	ER	Oregon State University	\$60,235.24	\$60,235.24	\$25,494.76	OPEN	Dombrowski, Tonya	30-Jun-13
W10704	Central Or. Low Impact Dev Ed project	2010	ER	Oregon Environmental Council	\$11,218.89	\$11,218.89	\$13,781.11	OPEN	Dombroski, Tonya	30-Jun-12

PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W10705	Warm springs ID Return Flow and Land Use Eval	2010	ER	Malheur SWCD	\$23,786.23	\$23,786.23	\$36,213.77	OPEN	Dombrowski, Tonya	30-Jun-12
W10706	Milton-Freewater Levee Setback Assessment	2010	ER	Walla Walla Basin Watershed Council	\$95,400.00	\$95,400.00	\$10,600.00	OPEN	Dombrowski, Tonya	30-Jun-12
W10707	Apple Sunburn Prevention - Phase 2	2010	ER	Oregon State University	\$53,462.93	\$53,462.93	\$26,537.07	OPEN	Dombrowski, Tonya	31-Mar-13
W10708	Powder River Restoration - Kirkway Reach	2010	ER	Powder Basin Watershed Council	\$0.00	\$ -----	\$23,400.00	OPEN	Dombrowski, Tonya	30-Jun-13
W10709	Streamside Planting & Maintenance	2010	NWR	Nestucca Neskowin Watershed Council	\$28,851.58	\$28,851.58	\$11,148.42	OPEN	Apple, Bruce	31-Mar-12
W10710	Targeted WQ Outreach to Coos Bay 2010	2010	WR	Coos Watershed Association	\$19,278.75	\$19,278.75	\$10,577.25	OPEN	Blake, Pamela	30-Jun-12
W10711	5000 Acres Initiative	2010	NWR	Tualatin Riverkeepers	\$0.00	\$ -----	\$51,914.00	OPEN	Newell, Avis	31-Dec-13
W10712	Riparian Restoration & Monitoring - Upper Nehalem	2010	NWR	Upper Nehalem Watershed Council	\$37,179.87	\$37,179.87	\$5,661.13	OPEN	Apple, Bruce	30-Jun-12
W10713	DEPAVE Summer 2010	2010	NWR	City Repair	\$8,823.10	\$8,823.10	\$0.00	CLOSED	Drake, Doug	31-Aug-11
W10714	Blue Lake Aquatic Macrophytes Reduction	2010	NWR	Blue Lake Improvement Association Inc	\$15,840.00	\$15,840.00	\$1,760.00	OPEN	Williams, Karen	31-Dec-12
W10715	Children Clean Water Festival	2010	NWR	Tillamook County Estuary Partnership	\$6,241.30	\$6,241.30	\$0.00	CLOSED	Apple, Bruce	31-Dec-11
W10716	Riparian Restoration & Maintenance	2010	NWR	Tillamook County Estuary Partnership	\$40,000.00	\$40,000.00	\$0.00	CLOSED	Apple, Bruce	31-Dec-11
W10717	Riparian Restoration	2010	NWR	Tillamook County SWCD	\$0.00	\$ -----	\$44,045.00	OPEN	Apple, Bruce	31-Dec-11
W10718	Sauvie Island Pesticide Collection Event	2010	NWR	West Multnomah Soil & Water Conservation District	\$0.00	\$ -----	\$5,000.00	OPEN	Drake, Doug	31-Jan-12
W10719	Regional BMP Sizing Tool Development	2010	NWR	Clackamas Co	\$22,992.29	\$22,992.29	\$28,392.71	OPEN	Drake, Doug	31-Dec-12
W10720	Ten Mile Lakes TMDL Implementation	2010	WR		\$0.00	\$ -----	\$25,000.00	OPEN	Blake, Pamela	
W10721	Low Impact Development Academy	2010	WR	Oregon State University	\$17,398.30	\$17,398.30	\$42,701.70	OPEN	Wright, Pamela	30-Mar-12
W10722	Sucker Creek Channel and Floodplain Rest -II	2010	WR	Illinois Valley SWCD	\$20,000.00	\$20,000.00	\$0.00	CLOSED	Tugaw, Heather	30-Jun-11
W10723	Pesticide Roundup events	2010	Cross Region	NO CONTRACT	\$0.00	\$48,759.16	\$8,382.74	OPEN	Harvey, Julie	
W10724	So. Willamette Val GW Mgmt Area Action Plan Implem	2010	WR	Lane Council of Governments	\$16,268.23	\$16,268.23	\$56,211.77	OPEN	Eldridge, Audrey	31-May-12
W10725	Streamside Gardening: Innovative approach	2010	WR	Oregon State University	\$10,245.82	\$10,245.82	\$11,309.18	OPEN	Tugaw, Heather	31-Dec-12

PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W10726	Medford Bacteria Source Roundup	2010	WR	City of Medford	\$0.00	\$ -----	\$7,320.00	OPEN	Tugaw, Heather	30-Jun-12
W10727	Impl. Monit. Of Umpqua Basin, Diamond Lake TMDL	2010	WR	Partnership for Umpqua Rivers	\$0.00	\$ -----	\$15,000.00	OPEN	Tugaw, Heather	30-Nov-12
W10728	Diamond Lake Modeling Project 2010-11	2010	WR	Partnership for Umpqua Rivers	\$11,353.90	\$11,353.90	\$29,830.10	OPEN	Waltz, David	31-Dec-12
W10730	Mid-Coast Basin NPS Imple. Initiative, Year 2	2010	WR	Lincoln SWCD	\$50,940.59	\$50,940.59	\$21,539.41	OPEN	Tugaw, Heather	30-Apr-12
W10732	Pudding Pesticide Stewardship Program	2010	Cross Region	Marion County SWCD	\$8,448.11	\$107,145.89	\$25,101.11	OPEN	Masterson, Kevin	31-Dec-12
W10733	Facilitation Assessment for Oregon MidCoast Basin	2010	WR	Portland State University	\$4,000.00	\$4,000.00	\$0.00	CLOSED	Waltz, David	29-Jul-11
W10734	Willamette Model Watershed Riparian Revegetation	2010	Cross Region	Bonneville Environmental Foundation	\$0.00	\$ -----	\$41,000.00	OPEN	Michie, Ryan	31-May-12
W11600	Milton-Freewater Levee Design Phase 2	2011	ER	TBD	\$0.00	\$ -----	\$82,702.00	OPEN	Dombrowski, Tonya	
W11601	Urban issues working group NPS education project	2011	ER	TBD	\$0.00	\$ -----	\$23,414.00	OPEN	Dombrowski, Tonya	
W11602	Preserving Umatilla's natural resources	2011	ER	TBD	\$0.00	\$ -----	\$59,300.00	OPEN	Dombrowski, Tonya	
W11603	Powder Basin Monitoring	2011	ER	TBD	\$0.00	\$ -----	\$25,385.00	OPEN	Dombrowski, Tonya	
W11604	NFJDWC Landowner	2011	ER	TBD	\$0.00	\$ -----	\$54,646.00	OPEN	Dombrowski, Tonya	
W11605	Red Boy Mine	2011	ER	TBD	\$0.00	\$ -----	\$40,273.00	OPEN	Dombrowski, Tonya	
W11606	Rock Creek Restoration Design	2011	ER	TBD	\$0.00	\$ -----	\$43,680.00	OPEN	Dombrowski, Tonya	
W11607	Reduce Pesticide Cont of Surf W in Hood River	2011	ER	TBD	\$0.00	\$ -----	\$14,969.00	OPEN	Dombrowski, Tonya	
W11608	Love Your River	2011	NWR	TBD	\$0.00	\$ -----	\$15,000.00	OPEN	William, Karen	
W11609	Upper Nehalem-riparian restoration	2011	NWR	Upper Nehalem Watershed Council	\$0.00	\$ -----	\$61,000.00	OPEN	Apple, Bruce	31-Dec-12
W11610	Children Clean Water Fest.	2011	NWR	Tillamook County Estuary Partnership	\$0.00	\$ -----	\$6,250.00	OPEN	Apple, Bruce	31-Dec-12
W11611	Streamside Planning and Maintenance	2011	NWR	Nestucca Neskowin Watershed Council	\$0.00	\$ -----	\$55,000.00	OPEN	Apple, Bruce	31-Dec-12
W11612	NC W's And riparian Enhancement	2011	NWR	TBD	\$0.00	\$ -----	\$30,000.00	OPEN	Apple, Bruce	
W11613	Johnson Ck effective Monit	2011	NWR	TBD	\$0.00	\$ -----	\$44,306.00	OPEN	Drake, Doug	
W11614	Riparian Restoration & Maintenance	2011	NWR	Tillamook County Estuary Partnership	\$0.00	\$ -----	\$55,000.00	OPEN	Apple, Bruce	31-Dec-12

PROJECT NO.	PROJECT TITLE	YEAR	REGION	CONTRACT WITH	PROJECT BUDGET	EXPEND-ITURES	BALANCE	STATUS	PROJECT MGR	END DATE
W11615	Dry Manure Storage	2011	NWR	Clatsop Soil & Water Conservation District	\$2,501.22	\$2,501.22	\$26,138.78	OPEN	Apple, Bruce	31-Dec-12
W11616	Milk Creek Streambank	2011	NWR	TBD	\$0.00	\$ -----	\$35,500.00	OPEN	William, Karen	
W11617	Cannon Beach Stormwater Planning	2011	NWR	TBD	\$0.00	\$ -----	\$30,000.00	OPEN	Apple, Bruce	
W11618	Non structural & Structural Stormwater Tools	2011	WR	University of Oregon	\$0.00	\$ -----	\$32,000.00	OPEN	Bayham, Chris	31-Dec-13
W11619	Groundwater Protection Education -So. Willa Val	2011	WR	Oregon State University	\$0.00	\$ -----	\$48,800.00	OPEN	Eldridge, Audrey	30-Jun-13
W11620	S Umpqua Water Quality	2011	WR	TBD	\$0.00	\$ -----	\$43,474.00	OPEN	Tugaw, Heather	
W11621	Upper Siletz Asses. And Resto. Project	2011	WR	TBD	\$0.00	\$ -----	\$41,994.00	OPEN	David Waltz	
W11622	Calapooia-Santiam Recruiting and Restoring Riparian	2011	WR	Calapooia Watershed Council	\$8,039.00	\$8,039.00	\$26,861.00	OPEN	Gramlich, Nancy	30-Sep-13
W11623	School Restoration Project II	2011	WR	Camas Education Network	\$0.00	\$ -----	\$28,750.00	OPEN	Fern, Jacqueline	30-Sep-13
W11624	LID Acad cohort	2011	WR	TBD	\$0.00	\$ -----	\$35,281.00	OPEN	Wright, Pamela	
W11625	Bear Creek and Rogue Basin TMDL Imp. Coord.	2011	WR	Rogue Valley Council of Governments	\$0.00	\$ -----	\$30,000.00	OPEN	Tugaw, Heather	01-Apr-13
W11626	Siuslaw WS WQ Salmon Habitat	2011	WR	Beyond Toxics	\$0.00	\$ -----	\$3,000.00	OPEN	David Waltz	31-Dec-12
W11627	Sucker Creek Restoration - Phase IIA	2011	WR	Illinois Valley SWCD	\$17,567.00	\$17,567.00	\$1,952.00	OPEN	Tugaw, Heather	30-Jun-12
W11628	Coos Bay Estuary Watershed	2011	WR	TBD	\$0.00	\$ -----	\$39,988.00	OPEN	Blake, Pam	
W11629	MidCoast TMDL	2011	WR	TBD	\$0.00	\$ -----	\$4,000.00	OPEN	Waltz, David	
W11630	Pesticide Stewardship Partnerships	2011	Cross Region	TBD	\$0.00	\$ -----	\$10,136.00	OPEN	Masterson, Kevin	
W11631	ODF RipStream: Stream temp changes	2011	Cross Region	TBD	\$0.00	\$ -----	\$34,925.00	OPEN	Seeds, Joshua	

## Appendix 2. DEQ's Geographic and Programmatic Priorities for 319 funded Projects in 2012

Table 9. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012.

Note: The identification of priority basins (as listed below) does not exclude the submission of proposals for work outside these basins. Exceptional project proposals for stream restoration, effectiveness monitoring, and pollutant reduction in non-priority basins will be considered.

EASTERN REGION PROJECT PRIORITIES: <u>TMDLS/303(d)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS/ 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>EASTERN REGION Stormwater</b>	<b>Region Wide</b>		Bacteria, Nutrients, Metals, Turbidity, Sediment	Targeted projects include water quality improvement specific to stormwater impacts including local planning, stakeholder and homeowner education, and information program development, feasibility studies and similar efforts.
<b>Grande Ronde Basin</b>  Channel and Riparian Restoration  Effectiveness Monitoring	<b>Basin Wide (Upper Grande Ronde, Lower Grande Ronde, Imnaha, and Wallowa)</b>	Upper Grande Ronde TMDL approved by EPA (May 2000)  Lower Grande Ronde, Imnaha, and Wallowa TMDLs (in progress)	Temperature, Nutrients, pH, Dissolved Oxygen	Targeted restoration projects include stream restoration activity in the area of on-going multi-year, multi-agency project work. Basin-wide targeted restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, and floodplain reconnection), revegetation of riparian area, and increased instream flow.  Targeted effectiveness monitoring projects include development and implementation of monitoring protocols to characterize the effectiveness of implementation projects and project types/elements specific to improving water quality and habitat in the basin.  Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>TMDLS/303(d)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS/ 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>John Day Basin</b>  Channel and Riparian Restoration  Effectiveness Monitoring	<b>Lower John Day, Middle Fork John Day, North Fork John Day, Upper John Day</b>	TMDL in progress	Temperature, Bacteria, Biological Criteria, Dissolved Oxygen, and Sediment	<p>On the Middle Fork John Day River, targeted restoration projects include stream restoration activities in the area of on-going multi-year, multi-agency project work. On the North Fork and Upper John Day River, targeted restoration projects include those activities addressing bacteria, sediment, and low dissolved oxygen. Basin-wide targeted restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, and floodplain reconnection), revegetation of riparian area, and increased instream flow.</p> <p>Targeted effectiveness monitoring projects include development and implementation of monitoring protocols to characterize the effectiveness of implementation projects and project types/elements specific to improving water quality and habitat in the basin.</p> <p>Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.</p>



Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>TMDLS/303(d)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS/ 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Mid-Columbia – Hood Subbasin</b>  Channel and Riparian Restoration  Effectiveness Monitoring	<b>Western Hood Subbasin, and Miles Creeks Subbasin</b>	Western Hood TMDL approved by EPA (Jan 2002)  Miles Creeks TMDL approved by EPA (Feb 2009)	Temperature  Sediment  Bacteria  Pesticides	<p>Targeted projects include activities addressing temperature, sediment, bacteria, and pesticides.</p> <p>Targeted restoration projects include stream restoration activity in the area of on-going multi-year, multi-agency project work. Targeted restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, and floodplain reconnection), revegetation of riparian area, and increased instream flow.</p> <p>Targeted effectiveness monitoring projects include development and implementation of monitoring protocols to characterize the effectiveness of implementation projects and project types/elements specific to improving water quality and habitat in the basin.</p> <p>Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.</p>
<b>Mid-Columbia – Hood Subbasin</b>  Pesticide Stewardship Activities	<b>Western Hood Subbasin, Miles Creeks Subbasin</b>	Western Hood TMDL approved by EPA (Jan 2002)  Miles Creeks TMDL approved by EPA (Feb 2009)	Pesticides	<p>Targeted projects include the design and implementation of programs to reduce pesticide transport to surface and ground waters and related impacts to water quality and increase public awareness of improved pesticide use and application practices. Targeted project elements include development of methodologies to monitor and track trends associated with changes in application practices and development of a public education program to increase public awareness of water quality concerns and their role in the solution of identified problems, designing and implementing tools for outreach specific to reduction of pesticides in surface and ground waters, and analysis of outreach success.</p> <p>Projects correlated with and/or adjacent to other implementation work will be given priority.</p>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>TMDLS/303(d)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS/ 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Malheur River Basin</b>  Pollutant Source Characterization	Lower Malheur Subbasin	TMDL in progress	Temperature Dissolved Oxygen Bacteria Pesticides Nutrients	Targeted projects include development and implementation of monitoring programs specific to source characterization of elevated water temperatures, nutrients, bacteria, pesticide concentrations, depressed dissolved oxygen in local surface and groundwater, and agricultural drains in support of targeting and refining TMDL implementation efforts and changes in management practices.  Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.
<b>Malheur River Basin</b>  Nutrient Reduction	Lower Malheur River, Willow Creek, and Bully Creek Subbasins	TMDL in progress	Temperature Dissolved Oxygen Bacteria Pesticides Nutrients	Targeted projects include research, design, and implementation activities that will reduce nutrient loading to the Lower Malheur River, its tributaries and groundwater in the Northern Malheur County Groundwater Management Area.  Projects correlated with and/or adjacent to other restoration work will be given priority.
<b>Malheur River Basin</b>  Agricultural Implementation	Upper Malheur River Subbasin, Warm Springs Reservoir, Bully Creek	TMDL in progress	Temperature Dissolved Oxygen Bacteria Pesticides Nutrients	Targeted projects include riparian area restoration activities in the Malheur River Basin. Targeted project elements include revegetation, fencing, grazing management, irrigation management, and effectiveness monitoring to characterize watershed response to implementation projects.  Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>TMDLS/303(d)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS/ 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Malheur River Basin</b>  Changes in Agricultural Tillage Practices	Lower Malheur Subbasin	TMDL in progress	Pesticides  Nutrients	<p>Targeted projects include the design and implementation of programs to reduce tillage related impacts to water quality and increase public awareness of improved tillage practices. Targeted project elements include identification of mechanisms to provide ready local access to conservation tillage equipment for multiple producers/landowners, development of a public education program to increase public awareness of water quality concerns and their role in the solution of identified problems, designing and implementing tools for outreach specific to conservation tillage, and analysis of outreach success.</p> <p>Proposed project(s) are expected to include substantial cropped acreage rather than small isolated sections. Projects correlated with and/or adjacent to other implementation work will be given priority.</p>
<b>Walla Walla River, Mid Columbia Basin</b>  Milton-Freewater Levee Assessment and Potential Restructure	Walla Walla River	TMDL approved by EPA (Sept 2005)	Temperature	<p>Targeted projects include the design and implementation of levee setbacks or restructure to allow increased sinuosity and floodplain reconnection while not contributing to downstream flooding risks. Targeted projects also include design and implementation of a community education program specific to the benefits and concerns associated with a levee setback. Projects should be designed to increase public awareness of water quality, fishery habitat, and aesthetic improvements related to levee restructure. The Milton-Freewater Levee has been identified as a primary contributor to temperature increases in the river system. Feasibility, design, implementation, and public information projects should be constructed with the goal of allowing water-quality issues to help guide the identification of future levee construction/repair options.</p>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>TMDLS/303(d)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS/ 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Walla Walla River, Mid Columbia Basin</b>  Upstream Levee Set back / Removal Assistance Opportunities	Walla Walla River	TMDL approved by EPA (Sept 2005)	Temperature	Targeted projects include the design and implementation of levee setbacks or removal on stream segments upstream of the Milton-Freewater levee to allow the river to reconnect with the historic floodplain while not contributing to downstream flooding risks. These projects should be designed to increase public awareness of water quality, fishery habitat, and aesthetic improvements related to levee restructure.  Projects correlated with and/or adjacent to other implementation work will be given priority.
<b>Walla Walla River, Mid Columbia Basin</b>  Pesticide Stewardship Activities	Walla Walla River	TMDL approved by EPA (Sept 2005)	Pesticides	Targeted projects include the design and implementation of programs to reduce pesticide transport to surface and ground waters and related impacts to water quality and increase public awareness of improved pesticide use and application practices. Targeted project elements include development of methodologies to monitor and track trends associated with changes in application practices and development of a public education program to increase public awareness of water quality concerns and their role in the solution of identified problems, designing and implementing tools for outreach specific to reduction of pesticides in surface and ground waters and analysis of outreach success.  Projects correlated with and/or adjacent to other implementation work will be given priority.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>GROUNDWATER MANAGEMENT AREAS (GWMAS)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: GWMA	WATER QUALITY PROBLEM	PROJECT NEED
<b>Lower Umatilla Basin Groundwater Management Area (LUB-GWMA)</b>  Action Plan	Umatilla Subbasin  Middle Columbia Basin	Lower Umatilla Basin GWMA Established in 1990	Nitrate-Nitrogen	<p>Targeted projects include those specific to reduction of nitrogen concentrations in groundwater including:</p> <ul style="list-style-type: none"> <li>• Research and development of activities or products that will reduce nitrate loading to groundwater. Targeted projects should address one of the five potential nitrate sources identified in the GWMA.</li> <li>• Revise fertilizer guides and recommended BMPs. Revised guidelines should describe the deficiencies of the current documentation and the number of acres that will be affected by the revisions; as well, as evaluate the environmental aspects of the revisions.</li> <li>• Document BMP implementation on the GWMA scale in a system that allows spatial analysis (e.g., GIS). Develop and implement a program to track BMP implementation (temporally and spatially) to facilitate quantification and documentation of projects and allow analysis of and linkage to monitoring well water quality relative to BMP implementation.</li> <li>• Perform field scale BMP performance evaluations. Identify appropriate locations and mechanisms to perform evaluations of BMPs (both existing and experimental) at the field scale. Proposed project plans should have very well developed monitoring plans capable of documenting BMP performance.</li> <li>• Evaluation of the Mineralization N Test. Comparison of the mineralization N test to other commonly used analyses to allow more accurate budgeting of nitrogen in the GWMA.</li> <li>• Develop and implement groundwater workshop for growers and certified crop advisors. Develop and sponsor workshops specific to groundwater protection. Ensure that the content is consistent with the intent of the action plans and with groundwater protection goals of DEQ and ODA.</li> <li>• Develop outreach material/strategy for small acreage growers and/or lawn and garden care – Develop targeted outreach and education programs to educate and reduce loading from small acreage growers and homeowners within the GWMA.</li> </ul>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

EASTERN REGION PROJECT PRIORITIES: <u>GROUNDWATER MANAGEMENT AREAS (GWMAS)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: GWMA	WATER QUALITY PROBLEM	PROJECT NEED
Northern Malheur County Ground Water Management Area (NMC- GWMA)  Nitrate Reduction	Lower Malheur River Subbasin	Northern Malheur County GWMA Established in 1989	Nitrate- Nitrogen	<p>Targeted projects include:</p> <ul style="list-style-type: none"> <li>Research and development of activities or products that will reduce nitrate loading to groundwater. Targeted projects should address a potential nitrate source identified in the GWMA.</li> <li>Document BMP implementation on the GWMA scale in a system that allows spatial analysis (e.g., GIS). Develop and implement a program to track BMP implementation (temporally and spatially) to facilitate quantification and documentation of projects and allow analysis of and linkage to monitoring well water quality relative to BMP implementation.</li> </ul>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Coos Subbasin (4th field HUC)</b>	Tenmile Lakes Basin (5th field HUC)	<b>TMDL Implementation</b>	Sediment and Nutrient Delivery from Land Management Activities in the Watershed.  Nuisance and Harmful Algae Blooms and Cyanotoxins Exceeding Human Health Guidelines	Evaluation and interpretation of data acquired post-TMDL (e.g., cyanobacteria/algae monitoring data) to derive information and develop technical reports; explore relationships among pollutant loading, water quality, lake and environmental conditions. Determine if data adequately address data needs identified in the TMDL and WQMP, and identify data gaps and data needs. Data management: format and submit data for upload into LASAR. Establish/maintain an effective, accessible system for managing water quality and environmental data that is not currently categorized in the LASAR database (e.g., cyanobacteria/algae monitoring data). Monitoring water quality parameters to address remaining data gaps identified in the TMDL and WQMP. Engage in partnerships to implement high priority projects identified in Designated Management Agencies' Implementation Plans.
<b>Coos Subbasin (4th field HUC)</b>	Coos Estuary – Isthmus and Coalbank Sloughs	<b>303(d) Listed Segments</b>  <b>TMDLs are Currently Pending Development</b>	Land Development And Management Practices Resulting In Increased Pollutant Delivery and Modified Hydrology	Outreach and Education on pollution prevention (P2) measures to landowners, developers, and light industrial entities present on Isthmus Slough. Identification of specific areas for implementation of stormwater best management practices and/or Low Impact Development (LID) Demonstration projects. LID projects will be implemented that reduce pollutant loading and interrupt accelerated pollutant delivery, including those resulting from stream channel modifications. Partnerships involving local jurisdictions (Cities of Coos Bay and North Bend) to better define pollutant loading into urban streams and into Coos Bay from stormwater runoff and conveyance systems (Pony Creek, Blossom Creek, and Coalbank Slough).

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Coos Subbasin</b> (4th field HUC)	Coos Estuary	303(d) Listed Segments  TMDLs are Currently Pending Development	Elevated Bacteria - Recreational Contact And Shellfish Growing Waters Standards Exceedance	Source assessment and “hotspot” identification to identify high priority projects with measurable bacterial reduction targets and that have demonstration potential.
<b>Mid Coast Basin</b> TMDL Implementation and Effectiveness Monitoring	Siletz- Yaquina, Alsea, Siuslaw and Siltcoos Subbasins	In Development; To Be Completed In 2010	Bacteria Temperature Dissolved Oxygen Sedimentation	Funds for the Mid Coast Basin have already been allocated to a two-year project that began last year; however, smaller projects that fill gaps in effectiveness monitoring will be considered for this year.
<b>Diamond Lake/Lemolo Reservoir / North Umpqua River</b>	Diamond Lake Lake Creek Lemolo Reservoir North Umpqua River	TMDLs Adopted	Aquatic Weeds Algae pH	Continued monitoring of lake water quality and biology trends tracking restoration efforts and lake health. Includes impacts to downstream waters.



Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
Umpqua Basin Umpqua and South Umpqua Rivers	Streams Providing and Having Potential to Provide Temperature Refugia  For Main Stems Only	TMDLs Adopted	Elevated Water Temperature	Improving and protecting riparian condition and riparian planting enhancement and/or restoration. Structures enhancing hyporheic flow. Needs includes identification of such areas of refugia and potential areas.
Umpqua Basin	Streams Lacking System Potential Vegetation	TMDLs Adopted	Elevated Water Temperature	Improving and protecting riparian conditions and riparian planting enhancement and/or restoration. Including structures enhancing hyporheic flow.
Umpqua Basin	Watersheds with Specific Load Reduction Needs as Noted in TMDLs	TMDLs Adopted	Elevated Bacteria and Nutrients	Improving and protecting riparian conditions and riparian planting enhancement and/or restoration, livestock fencing, and off-channel watering, and "other" source reduction implementation BMPs (Rural Residential, Urban, Cities, etc.)

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
Umpqua Basin	Streams with Elevated Levels Above Background	TMDLs Adopted	Bacteria and Nutrients	Additional monitoring to further identify existing elevated levels of NPS loading. Also includes pre and post monitoring documenting effectiveness of project implementation measures.
Umpqua Basin	Water Quality Plan Development and Implementation	TMDLs Adopted	All Parameters	Assistance to Designated Management Agencies (predominantly Cities and Douglas County) for WQMP development and implementation. Refinement of Action Plans to Water Quality Implement Plan.
Umpqua Basin	Areas of Need (such as Sutherlin Stormwater Impacts to Sutherlin and Cook Creeks Reducing Toxics)	303(d) Listed Waters	Accelerated pollutant delivery	Stormwater management planning and implementation assistance for local jurisdictions not required to develop stormwater plans (i.e., Urbanized Area not meeting designation for MS4 permit).
Umpqua Basin Diamond Lake Priority Area	All waters		Invasive Species	Outreach and Education Development of materials and programs to provide educational opportunities and awareness noting water quality beneficial use impairment possible from invasive species introductions.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Willamette River Basin (Outside Portland Metro) Subbasins:</b>  <b>Middle Willamette (River Mile 50-108)</b>  <b>North Santiam</b>  <b>Upper Willamette Subbasin (River Mile 108-187)</b>	Gibson Gulch and Labish Ditch  Amazon Creek  Long Tom River  Lukiamute River Tributaries  Beaver, Boulder Pierce, Mackey, and Morgan Creeks Tributaries to North Santiam  Mission and Champoeg Creeks /Middle Willamette Tributaries	TMDLs Adopted and 303 (d) Listings	Arsenic  Bacteria  Dissolved Oxygen  Mercury  Pesticides  Temperature  Turbidity	Temperature reduction proposals addressing water quality conditions in both urban and rural settings. Outreach for and implementation of collaborative riparian restoration projects in both urban and rural settings to address temperature and/or erosion of sediment on TMDL streams and tributaries and projects identified in TMDL Implementation Plans. Stormwater planning and implementation of stormwater runoff control strategy or management practice to address erosion of sediments laden with parameters such as, bacteria, metals, and pesticides (ex., retrofit surveys, and project list; retrofit project; LID urban projects; and conveyance mapping). Specific toxic/parameter reduction projects and/or special partner projects.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Willamette River Basin (Outside Portland Metro) Subbasins:</b>  <b>Middle Willamette River (River Mile 50-108)</b>  <b>South Santiam River</b>	Rickreall Creek and Tributaries  South Santiam River Tributaries/ Hamilton, Ames, and Noble Creek Tributaries	TMDLs Adopted and 303 (d) Listings	Bacteria Dissolved Oxygen Iron Mercury Nitrates Pesticides Temperature	Stormwater planning and implementation of stormwater runoff control strategy or management practice to address erosion of sediments laden with parameters such as, bacteria, metals, and pesticides (ex., retrofit surveys, and project list; retrofit project; LID urban projects; and conveyance mapping). Special partner projects for the implementation of educational measures addressing illicit discharge for the protection of water quality in urban areas.
<b>Willamette River Basin (Outside Portland Metro) Subbasins:</b>  <b>Coast Fork McKenzie Middle Fork</b>	Mohawk River Tributaries  Little Fall Creek and Tributaries  Coast Fork Tributaries	TMDLs Adopted and 303(d) Listings	Bacteria Dissolved Oxygen Mercury Pesticides Temperature	Stormwater planning and implementation of stormwater runoff control strategy or management measure to address erosion of sediments laden with parameters such as, bacteria, metals, and pesticides (ex., retrofit surveys, and project list; retrofit project; LID urban projects; and conveyance mapping). Outreach for and implementation of collaborative riparian restoration projects in urban and/or rural settings to address temperature and/or erosion of sediment on TMDL streams and tributaries and projects identified in TMDL Implementation Plans.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Willamette River Basin (Outside Portland Metro) Subbasins</b>  <b>Pudding River</b>  <b>Yamhill River</b>	Pudding River and Tributaries (e.g., Brush, Mill, Little Pudding, Senecal, Zollner and Silver Creeks; Labish and Walker Ditch)  Yamhill River and Tributaries	TMDLs Adopted, TMDLs Under Development and 303(d) Listings	Bacteria Dissolved Oxygen Iron Mercury Nitrates Temperature Legacy and Current Use Pesticides	Temperature reduction proposals addressing water quality conditions in both urban and rural settings (e.g., temperature trading plan). Specific toxic/parameter reduction or bacteria reduction projects and/or special partner projects (e.g., pesticide collection events, legacy pesticide hotspot monitoring, education/outreach to rural and agricultural landowners in areas of reduced pesticides, manure management, and fertilizer management). Development of riparian or stormwater control ordinances for small sized communities. Stormwater planning and implementation of stormwater runoff control strategy or management measure (ex., retrofit project; LID urban project, and conveyance mapping). Outreach for and implementation of collaborative riparian restoration projects in urban and/or rural settings to address temperature and/or erosion of sediment on TMDL streams and tributaries and projects identified in TMDL Implementation Plans.
<b>Rogue Basin</b>	Upper Rogue HUC 17100307  Middle Rogue HUC 17100308  Lower Rogue HUC 17100310  Illinois HUC 17100311	TMDLs Adopted	Temperature Bacteria	Implementation of efforts identified in Water Quality Implementation Plans or Water Quality Management Plans (WQMP). Potentially including: <ul style="list-style-type: none"> <li>• Development of riparian ordinance,</li> <li>• Stormwater management for non-phase ii communities,</li> <li>• Low impact development projects,</li> <li>• Improvement of riparian shade and function,</li> <li>• Control livestock access to streams,</li> <li>• Irrigation improvement projects, and</li> <li>• Science-based projects to restore floodplain connectivity and natural wood recruitment.</li> </ul>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Rogue Basin</b>	Applegate HUC 17100309	TMDLs Adopted	Temperature Sedimentation	Implementation of efforts identified in Water Quality Implementation Plans or Water Quality Management Plans (WQMP). Potentially including: <ul style="list-style-type: none"> <li>• Improvement of riparian shade and function,</li> <li>• Control sediment sources,</li> <li>• Control livestock access to stream, and</li> <li>• Science-based projects to restore floodplain connectivity and natural wood recruitment.</li> </ul>
<b>Rogue Basin</b>	Lobster Creek HUC 1710031007  Sucker Creek HUC 1710031103	TMDLs Adopted	Temperature	Implementation of efforts identified in Water Quality Implementation Plans or Water Quality Management Plans (WQMP). Potentially including: <ul style="list-style-type: none"> <li>• Improvement of riparian shade and function,</li> <li>• Control sediment sources,</li> <li>• Control livestock access to stream, and</li> <li>• Science-based projects to restore floodplain connectivity and natural wood recruitment.</li> </ul>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>TMDL DEVELOPMENT AND IMPLEMENTATION</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Rogue Basin</b>	Bear Creek HUC 1710030801	<b>TMDLs Adopted</b>	Temperature Bacteria Sedimentation Aquatic Weeds or Algae Phosphorus Dissolved Oxygen	Implementation of efforts identified in Water Quality Implementation Plans or Water Quality Management Plans (WQMP). Potentially including: <ul style="list-style-type: none"> <li>• Development of riparian ordinance,</li> <li>• Stormwater management for non-phase ii communities,</li> <li>• Low impact development projects,</li> <li>• Improvement of riparian shade and function,</li> <li>• Irrigation improvement projects,</li> <li>• Control livestock access to streams, and</li> <li>• Science-based projects to restore floodplain connectivity and natural wood recruitment.</li> </ul>
<b>Rogue Basin</b>	Bear Creek HUC 1710030801	<b>303(d) Listing</b>	Mercury	Investigation of Emigrant Lake 303(d) listing for mercury.
<b>Rogue Basin</b>	Upper Rogue, HUC 17100307	<b>303(d) Listing</b>	Cyanobacteria (Blue-Green Algae)	Investigation of lost Creek Lake, Lake Slemac or other 303(d) listed waterbodies for Cyanobacteria (blue-green algae).
<b>Rogue Basin</b>	Lower Rogue, HUC 17100310	<b>Category 3B Listing</b>	bacteria – Shellfish Standard	Investigation of the Rogue River Estuary 303(d) listing for bacteria.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>DRINKING WATER SOURCE PROTECTION (DWSP)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Siletz- Yaquina Subbasin</b>	Drinking Water Source Areas Upstream of Newport Intake	Source Water Assessments Complete	Bacteria Toxics Sediment Nutrients	Projects addressing higher risk nonpoint source potential contamination documented in DEQ/DHS Source Water Assessments including: stormwater, forest management, agricultural activities, land application sites, and/or river recreation. Projects that include multiple stakeholders/water systems will be given priority. Project activities can supplement TMDL implementation efforts.
<b>Umpqua Basin – South Umpqua</b>	Tributaries and Sections of The South Umpqua River Within Drinking Water Source Areas	Approved TMDLS; Source Water Assessments Complete	Elevated Bacteria and Nutrients, Toxics Sediment Public Water Systems Reporting High E. Coli Counts to EPA	Projects addressing higher risk nonpoint source potential contamination documented in DEQ/DHS Source Water Assessments including agriculture and forest management. Projects that also address TMDL implementation efforts are encouraged.
<b>Rogue Basin</b>	Drinking Water Source Areas Upstream of Gold Beach Intake	Approved TMDLS, Source Water Assessments Complete	Bacteria Toxics Sediment Nutrients	Projects addressing higher risk nonpoint source potential contamination documented in DEQ/DHS Source Water Assessments including: forest management, stormwater, agriculture, and residential land-use activities. Projects that include multiple stakeholders/water systems will be given priority. Projects that also address TMDL implementation efforts are encouraged.
<b>Coquille Subbasin</b>	Drinking Water Source Areas Within Subbasin	Source Water Assessments Complete	Bacteria, Toxics, Sediment, Nutrients	Projects Addressing Higher Risk Non-Point Source Potential Contamination Documented In DEQ/DHS Source Water Assessments Including Stormwater, Agricultural Activities, And Forest Management. Project Activities Can Supplement TMDL Development Efforts.



Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

WESTERN REGION PROJECT PRIORITIES: <u>DRINKING WATER SOURCE PROTECTION (DWSP)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
Western Region	Southern Willamette Valley Groundwater Management Area	GWMA	Nitrate in Groundwater	<p><u>Analysis:</u> Gaps analysis based on the GWMA Action Plan Evaluation. Identify any actions needed to complete strategies, and any strategies that are either missing or require some modifications to arrive at the GWMA goal. Prioritize based on GWMA Committee criteria.</p> <p><u>Marketing:</u> Prepare and implement a social marketing program. Include the use of focus Groups for branding the GWMA, identifying barriers for recognition; and/or targeting residents and farmers and their barriers for testing water/using aquifer-safe fertilizer/irrigation practices.</p> <p><u>Outreach:</u> Prepare GWMA materials for other agencies. Include a train-the- trainer program. Follow-up on commitment from other agencies to use and present. Tour with involved agencies, staff, etc.</p> <p><u>Implementation:</u> Implement priority strategies in the GWMA Action Plan, as identified by the GWMA Committee. Assist with GWMA Committee meeting preparations, schedule, and follow-up with meeting minutes.</p>

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

Areas identified can be found at: <http://www.deq.state.or.us/wq/dwp/results.htm>.

NORTHWEST REGION PROJECT PRIORITIES: <u>DRINKING WATER SOURCE PROTECTION (DWSP)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
All NWR Basins	Drinking Water Source Areas With Focus on Riparian Areas/ Sensitive Areas Affecting Intakes and Sensitive Areas Contributing to Groundwater Wells.	Source Water Assessments Should Be Completed Prior To Awarding 319 Funding	Bacteria Blue Green Algae Toxics (Emerging Pollutants) Sediment Nutrients	Projects addressing higher risk nonpoint source potential contamination within sensitive areas based on data and recommendations from the DEQ/DHS Source Water Assessment reports and surface water sampling (by USGS and DEQ).  This includes household hazardous waste, stormwater, pesticides, agricultural crops, nurseries, forestry, and onsite septic systems. Activities can supplement TMDL implementation activities.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

NORTHWEST REGION PROJECT PRIORITIES: <u>TMDLS/303(D)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
All NWR Basins/TMDL Implementation	Clackamas River	TMDLs Completed	Temperature	Riparian and in-channel restoration (erosion control, large wood placement). Pesticide partnership projects and/or specific toxic reduction projects. Innovative storm water planning/tools, education, and demonstration projects (includes hydromodification modeling, tools, and Low Impact Development approaches practices (LIDA)). Agriculture BMPs (includes fencing and digester projects).
	Lower Willamette River		Bacteria	
	Molalla River		Dissolved Oxygen	
	North Coast		Nutrients (Phosphorus)	
	Tillamook		Sediment	
	Tualatin		Toxics (Mercury)	
All NWR Basins/ TMDL Implementation	Clackamas, Lower Willamette, North Coast, Tillamook, Tualatin,	TMDLs Completed  Implement ation Plans in Place	Temperature	Project or TMDL (watershed) Effectiveness Monitoring. Evaluating effectiveness of projects, strategies, and desired outcomes (e.g., increased shade, lower pollutant levels, water quality TMDLs targets met).
			Bacteria	
			Nutrients (Phosphorus)	
			Sediment	
			Toxics (Mercury)	

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

NORTHWEST REGION PROJECT PRIORITIES: <u>TMDLS/303(D)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
<b>Molalla River/TMDL Implementation</b>	Mainstem	Completed December 2008	Temperature	Restoration/protection activities in upper mainstem coordinated with BLM recreation corridor planning and Molalla River Alliance planning.  TMDL implementation monitoring for cities of Canby, Molalla, and Scotts Mills. Also for Clackamas County, and Oregon Department of Geology and Mineral Industries.  Molalla Irrigation District TMDL implementation plan.  Field studies and/or models to quantify hyporheic flow; Studies to better understand geomorphology and hydrology (specifically channel widening) that help identify stable restoration areas and reaches that should be protected.
<b>Molalla River/TMDL Implementation</b>	North Fork		Temperature	Riparian restoration.  Monitoring pre/post logging.  Land acquisition.  Road abandonment.
<b>Molalla River/TMDL Implementation</b>	Milk Creek		Temperature	Riparian restoration.  Stream flow monitoring.
<b>Molalla River/TMDL Implementation</b>	Table Rock Fork		Temperature	Riparian restoration/protection activities coordinated with BLM recreation corridor planning and Molalla River Alliance planning.  Road abandonment.

Table 14. DEQ Geographic and Programmatic Priorities for 319 Nonpoint Source Implementation Grants in 2012 (Cont.)

NORTHWEST REGION PROJECT PRIORITIES: <u>TMDLS/303(D)</u>				
BASIN / PRIORITY ACTIVITY	SPECIFIC LOCATION	STATUS: TMDLS / 303(d)	WATER QUALITY PROBLEM	PROJECT NEED
Lakes	Blue Lake	Data Collection	Nutrients Algae Invasive Weeds ph	Invasive weed harvesting/prevention/education efforts. Pilot projects demonstrating invasive weed control techniques. Boat cleaning station. Equipment and apparatus associated with aquatic weed and blue-green algae control. Water quality, phytoplankton, and plankton project effectiveness monitoring.

## Appendix 3. 2013-319 Grant Request for Proposals

Table 10. Project Proposals Received in Response to the 2013 RFP.

PROJECT NUMBER	REGION	BASIN	APPLICANT	TITLE	PROPOSED 319 BUDGET	MATCH	TOTAL
ER1210	Eastern Region	Klamath	Klamath Basin Rangeland Trust	Improving Tools and Protocols in the Klamath Tracking and Accounting Program	\$59,588	\$60,000	\$119,588
ER1222	Eastern Region	Powder	BLM Vale	BLM Nutrient Monitoring in the Powder Basin	\$72,100	\$110,790	\$182,890
ER1223	Eastern Region	John Day	Columbia Blue Mountain RC&D	John Day / Umatilla AFO/CAFO Nutrient Management Project	\$160,000	\$107,000	\$267,000
ER1224	Eastern Region	Deschutes	City of Madras	Central Corridor Stormwater Collection and WQ Treatment Project	\$45,000	\$30,000	\$75,000
ER1225	Eastern Region	Central Oregon	Central Oregon Intergovernmental Council	Central Oregon LID Demonstration Project	\$98,250	\$210,246	\$308,496
ER1226	Eastern Region	Crooked River	Crooked River Watershed Council (CRWC)	Water Quality and Effectiveness Monitoring in the Crooked River Watershed	\$48,788	\$51,708	\$100,496
ER1227	Eastern Region	Walla Walla	CTUIR	S. Fork Walla Walla River Kentch Levee Removal and Floodplain Reconnection P	\$175,000	\$929,000	\$1,104,000
ER1228	Eastern Region	Grande Ronde	Grande Ronde Model WS Foundation	Stream Simulation Trailer	\$2,500	\$4,051	\$6,551
ER1229	Eastern Region	Deschutes	Jefferson County SWCD	Groundwater Nitrate Source of Mud Springs	\$17,200	\$34,400	\$51,600
ER1230	Eastern Region	Cusick Creek	Keating SWCD	Cusick Creek—Going Back in Time	\$99,050	\$269,235	\$368,285
ER1231	Eastern Region	Owyhee	Malheur County SWCD	Owyhee River Improvement Project - Phase 3	\$39,187	\$34,600	\$73,787
ER1232	Eastern Region	Easter Oregon	OSU	Channel Restoration Bioassessment in Eastern Oregon	\$46,038	\$33,071	\$79,109
ER1233	Eastern Region	Umatilla/ Wasco	OSU	Salmon-Safe Certification of Sweet Cherries in Umatilla County and Wasco County	\$57,248	\$38,544	\$95,792
ER1234	Eastern Region	Owyhee	Owyhee WSC	Filter Strip Water Quality Improvement	\$25,300	\$19,600	\$44,900
ER1235	Eastern Region	Umatilla	Umatilla Basin WSC	Umatilla Basin / Willow Creek Sub-Basin – Watershed Improvement Targets	\$107,880	\$585,191	\$693,071
ER1236	Eastern Region	John Day	John Day Basin Trust	Upper South Fork John Day River Monitoring Program	\$60,000	\$51,035	\$111,035

PROJECT NUMBER	REGION	BASIN	APPLICANT	TITLE	PROPOSED 319 BUDGET	MATCH	TOTAL
ER1237	Eastern Region	Walla Walla	Walla Walla Basin WSC	Milton-Freewater Levee Setback and Habitat Enhancements	\$100,000	\$71,735	\$171,735
NWR1205	North West Region	Scappoose Bay	Scappoose Bay WSC	Milton Dart Creek Enhancement Project	\$26,248	\$62,535	\$88,783
NWR1208	North West Region	Upper Nehalem	Upper Nehalem WSC	Upper Nehalem Riparian Restoration	\$59,315	\$73,475	\$132,790
NWR1209	North West Region	Tualatin	Tualatin SWCD	Tualatin Pesticide Collection Event	\$32,643	\$23,849	\$56,492
NWR1211	North West Region	Tillamook	TEP	Backyard Planting Program Yr 10	\$60,000	\$40,000	\$10,000
HQ-WR1212	North West Region	Willamette	BEF	Willamette Model Watershed Riparian Revegetation	\$10,000	\$20,000	\$30,000
NWR1214	North West Region	Tillamook	TEP	2013 Tillamook County Children Clean Water Festival	\$6,000	\$4,151	\$10,151
NWR1216	North West Region	Lower Columbia	LCREP	Lower Columbia Pesticide Collection Project	\$11,458	\$10,040	\$21,498
NWR1217	North West Region	Tillamook	Tillamook Bay WSC	Northwest Oregon Restoration Partnership	\$30,020	\$20,000	\$50,020
NWR1218	North West Region	Lower Nehalem	Lower Nehalem WSC	South Fork Nehalem Dairy Farm Riparian Enhancement	\$19,694	\$13,142	\$32,836
NWR1219	North West Region	Tillamook	Tillamook Co SWCD	Tillamook SWCD 2012 Stream Enhancement and Restoration	\$40,582	\$42,124	\$82,706
NWR1220	North West Region	Nestucca-Neskowin	Nestucca Neskowin WSC	Nestucca Riparian Restoration	\$60,000	\$40,000	\$100,000
NWR1243	North West Region	Clackamas	Clackamas RIVER WSC	Connecting People to WQ - Little Actions Make a Big Difference	\$35,462	\$26,423	\$61,885
NWR1242	Western Region	Portland	DEPAVE	DEPAVE 2013	\$17,933	\$38,525	\$56,458

PROJECT NUMBER	REGION	BASIN	APPLICANT	TITLE	PROPOSED 319 BUDGET	MATCH	TOTAL
HQ-NWR-WR1215	Cross Region	North-Mid range	ODF	ODF RipStream: Downstream temperature response to harvest	\$40,000	\$26,400	\$66,400
WR1201	Western Region	Garrison Lake	Curry Co SWCD	Garrison Lake Septic Revitalization Project	\$7,186	\$9,796	\$16,982
WR1202	Western Region	Curry	Curry Co SWCD	Nitrogen Sources in a Tidally-Restricted Estuary	\$13,419	\$15,307	\$28,726
WR1203	Western Region	City of Bandon	City of Bandon	12th Street Addition Bio-Swales	\$30,000	\$19,800	\$49,800
WR1204	Western Region	Coquille	Coos WS Assoc	S. Fork Coquille River Action Plan	\$14,850	\$73,551	\$88,401
WR1206	Western Region	SWVGW MA	Lane COG	SWVGWMA Partners and Stakeholders Action Project	\$43,471	\$69,414	\$112,885
WR1207	Western Region	Morgan Creek	Douglas SWCD	Morgan Creek Assessment and Restoration Project	\$45,000	\$46,836	\$91,836
WR1213	Western Region	Mid-Coast	Lincoln SWCD	Mid-Coast BMP Implementation Project	\$45,420	\$95,924	\$141,344
WR1221	Western Region	Santiam-Calapooia	South Santiam WSC	Santiam Calapooia WQ Monitoring Project	\$108,592	\$74,111	\$182,703
WR1238	Western Region	Applegate	Applegate Partnership and WSC	Little Applegate Sig POD Measuring Device Project	\$7,000	\$12,640	\$19,640
WR1239	Western Region	Bear Creek	Bear Creek WSC	Stream Smart: Bear Creek Clean Water Project marketing campaign	\$18,900	\$13,700	\$32,600
WR1240	Western Region	Butte Creek	Jackson SWCD	Little Butte Creek Water Quality – Frey Phase	\$20,000	\$85,300	\$105,300
WR1241	Western Region	Rogue	Rogue Valley COG	Rogue Basin Model Stormwater Program Development	\$25,000	\$21,237	\$46,237
<b>TOTALS</b>					<b>\$2,041,322*</b>	<b>\$3,618,486</b>	<b>\$5,569,808</b>

\*The amounts presented here for the proposed 319 budget represent the total request for proposals received as a result of the 2013 RFP. To date DEQ has not finalized the list of proposals and the amounts.



## Appendix 4. 2013 Request for Proposals

Commented [A8]: Why would we put the RFP in the annual report?

## Appendix 5. 2012 Oregon DEQ Nonpoint Source Implementation Grant Agreement

Commented [A9]: Why would we put this in the annual report?